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Developing and Integrating a Lessons Learned Methodology for Humanitarian Mine Action

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**Developing & Integrating
a
Lessons Learned Methodology
for
Humanitarian Mine Action**

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Executive Summary

The demand for a centralized lessons learned database has made it clear that there is value in consolidating the experience derived from the numerous de-mining missions by a variety of teams in a variety of countries. Consequently, the James Madison University Mine Action Information Center developed a methodology for collecting, validating, and distributing lessons-learned within the mine action community.

In order to develop this lessons-learned system, individuals involved in the wide spectrum of activities (victim assistance, mine clearance, survey, mine awareness, etc.) and belonging to the myriad agencies (NGOs, military demining, United Nations, MACs, etc.) related to the field of mine action were contacted and interviewed individually, and at two international conferences. Finally, the current state of lessons-learned within the community was analyzed, a Needs Assessment was performed, key stakeholders were identified, and a working model was developed.

The current state of lessons-learned activities within the mine action community can be summarized in several key points:

- The current method utilizes informal, isolated information sharing practices.
- Lessons-learned exist in a variety of long, narrative reports and individual experiences.
- Lessons-learned are rarely validated through formal procedures.
- Much of the lessons-learned are generated and shared exclusively within the operations level.
- Different organizational levels have different “lessons-learned requirements.”
- There are many weaknesses in the current system, particularly; limited fields access to lessons-learned information and the lack of standardized information.
- There are several strengths including an abundance of information and large horizontal information flows at the operations level.

The following are some of the recommendations developed to improve the current state of lessons-learned practices:

- Utilize a neutral, pre-existing clearinghouse to collect, validate, and distribute mine action lessons-learned.
- Collected distilled lessons-learned, separate from existing reporting forms.
- Use passive/voluntary collection methods.
- Collect information using a standard reporting form.
- Collect and distribute information primarily via the Internet.
- Validate information using annual review and “self-policing” techniques.
- Distribute lessons-learned to mine action organizations and MACs via the Internet and quarterly bulletins.

I. Introduction

The Mine Action Information Center at James Madison University (MAIC) is developing a system for identifying, capturing, and disseminating “lessons-learned” within the mine action community.

Information gathered for this project was obtained by contacting and interviewing operators, policymakers, donors, members of the United States Army, NGOs, and MACs. In addition to direct consultation with organizations involved, considerable information was gathered from the Second Workgroup at the World Wide Mine Detecting Dog Conference held in Ljubljana, Slovenia 13-15 September 1999, which was tasked with examining lessons-learned practices within the mine action community (a list of participants is provided in Appendix A). Follow-up and additional consultations were held at the Mine Clearance standards Users Focus Group meeting sponsored by the Geneva International Centre for Humanitarian Demining held at James Madison University from 27-29 October 1999 (participant list provided in Appendix B). Moreover, information was collected from other organizations outside the mine action community that also perform lessons-learned related tasks.

In order to develop a methodology for capturing and disseminating lessons-learned within the mine action community the current state of knowledge within the community was analyzed, a Needs Assessment was performed, key stakeholders were identified, and finally a working model was developed.

1. The Mine Action Community

Broadly conceived, the mine action community consists of the following components:

- U.S. government agencies that have as part of their mission the development of programs for humanitarian demining in selected countries
- volunteer organizations that are directly involved in the task of humanitarian demining
- for-profit organizations that are directly involved in the task of humanitarian demining
- those who devise or provide technologies for this activity
- volunteer organizations whose primary mission is that of providing short emergency aid or long term development assistance to victims of natural disasters and civil unrest that brings them into contact with the landmine threat
- organizations whose interest in the field of humanitarian demining lies in the area of public advocacy

- academic and research organizations whose involvement in humanitarian demining is largely tangential through their broader interest in world politics
- relief organizations that have a sustained and direct exposure to humanitarian demining projects
- UN or international organizations' agencies that are charged with demining as a subset of responding to complex human emergencies and promoting disaster prevention and preparedness
- local or host government agencies that provide an indigenous capability to undertake humanitarian demining operations
- military units engaging in the task of humanitarian demining

The field of mine action involves a diverse community with a wide range of interests. Clearly some types of organizations will be more likely to participate in a lessons-learned system, particularly those organizations associated with mine clearance, surveying, and disposal. However, many other organizations have expressed some interest in developing a system for sharing lessons-learned, from Victim Assistance groups to financial donors. Any new lessons-learned system must be capable of accommodating the various diverse interests associated with the mine action community.

2. What are lessons-learned?

In its broadest sense, lessons-learned information is composed of:

- Positive and negative experiences directly relating to the conduct of mine actions programs
- Test results whether from operations themselves or from product testing
- Program evaluations of ongoing programs
- Standard Operating Procedures (SOPs) as developed for specific operations and changes to existing SOPs

Lessons-learned consist of knowledge and experience derived from either direct observation or indirect observation through study of relevant operations and validated through some recognized and widely accepted process.

3. Why is lessons-learned information important?

There is clearly a need to develop some standardized reporting system for lessons-learned within the mine action community. In consultations with individual operators, policy-makers, donors, and other interested

“Experience is a hard teacher because she gives the test first, the lessons afterward.”
-Vernon Law, Pittsburgh Pirates

persons the following were established as categories of reasons to develop lessons-learned reporting:

- To improve safety
- To increase effectiveness of current and future humanitarian demining operations
- To encourage further cooperation within the mine action community

Operations managers and field personnel have noted that organizations and individuals often repeat mistakes over and over again. Many of these mistakes can be prevented with the benefit of others' experiences. The sharing of lessons-learned can significantly increase the effectiveness of the mine action community while encouraging interaction among this diverse group of organizations.

II. Current State of Lessons-Learned Practices

1. How are lessons-learned captured?

Very few organizations in the mine action community have formal methods for collecting lessons-learned (one notable exception being the United States military). Much of the current lessons-learned information is captured

in field operations or during testing phases. The greatest amount of lessons-learned information is gathered from the experiences of personnel at the operations level, people closest to day to day mine action operations. This information is then translated into Standard Operating Procedures (SOPs) which are then informally evaluated and revised as new lessons are learned.

"There is no such an animal out here in the NGO or commercial humanitarian demining world."

--James "Gregg" Pulley, RONCO Consultants

There are, however, few formal procedures for capturing these lessons-learned within the mine action community. To the extent that lessons-learned are collected, it is usually through informal channels, and as an adjunct to some other review process. For example, after-action reports often contain lessons-learned information but it is imbedded in often-dense reports as part of a narrative description of activities. There are three problems with lessons-learned information presented in this format:

- The pertinent information concerning lessons-learned is not easily retrieved.
- These reports flow vertically within organizations but rarely do they flow horizontally either within or among organizations.
- They may contain other information that is proprietary or sensitive.

Lessons-learned, collected and stored in this manner, are often difficult to categorize, much less use, and are often kept within the organization in which they originate. More formal procedures for collecting lessons-learned within the mine action community

would considerably reduce the resources wasted due to improper/ineffective information sharing.

The U.S. Army, on the other hand, has a well-developed system for capturing lessons-learned built into its After-Action Reports (AARs). As part of every AAR, individuals and units are expected to submit lessons-learned as part of a final report. These lessons are then stored at the Center for Army Lessons-Learned and distributed as necessary. This type of formal collection procedure is rare in the mine action community due to great variety of organizations, command structures, and reporting procedures as well as to poor coordination. The large abundance of independent and semi-independent actors in the mine action community has thus far prevented the development of any standards for lessons-learned collection.

2. Where does lessons-learned information exist now? How is it validated?

The current state of lessons-learned information in mine action is that information resides in many places, but is difficult to access or evaluate. While some organizations, NGOs, MACs, PVOs, Government agencies, and military commands, Attempt to evaluate programs for their effectiveness and to some extent to gather lesson-learned, much of this information is kept “in-house,” inaccessible to other organizations within the community. There is no central depository for lessons-learned information within Mine Action, though the information does exist, particularly in the form of:

“Information exists everywhere and nowhere.”

--J. Theo van Dyk, Mechem Consultants

- After-action reports
- Final Technical reports
- Standard Operating Procedures (SOPs)
- Daily/Situation Reports
- External evaluations
- Experienced personnel

These **reports contain varying levels of lessons-learned information.** The final technical reports and post-operation reports of some organizations contain specific sections for lessons-learned. Mechem Consultants adds a lessons-learned element to their technical reports whenever it is warranted. Others simply pass the information informally, by word of mouth or individual correspondence. SOPs are generally the culmination of lessons-learned information within an organization, but as noted above, are often in narrative form making it difficult to distill pertinent lessons-learned. In contrast, After-Action Reports (AARs) from the U.S. Army separate lessons-learned into their own section within the report, often simplifying search efforts for appropriate lessons-learned.

These **forms of lessons-learned information are generally kept “in-house” and independent of each other** varying from organization to organization. There is little

sharing of final reports, external evaluations, etc and only slightly more willingness to share SOPs. Generally, mine action organizations have regarded these types of information as proprietary or confidential, though recently there has been more willingness to share specific parts of these reports. Some mine action organizations, specifically RONCO Consultants and Mechem Consultants have already expressed a willingness to share SOPs related to mine clearance operations.

Lessons-learned are rarely formally validated by external sources. Validation in the current lessons-learned practices is performed within the organization that developed the lesson-learned. Since there is little sharing of reports among mine action agencies, they are not reviewed externally. The exception to this is safety information that is often shared among mine clearance organizations at the operational level. This information is validated by repeated use in the field, though there are no formal validation procedures. This creates the potential problem of unhelpful, or possibly dangerous information being distributed to field operations.

3. How is it shared? How is it disseminated?

The current method of disseminating mine action lessons-learned is largely inadequate to the community's needs. Some information flows very freely at the operations level, particularly information related to safety, performance, and some logistical details. Furthermore, though information flows up from the operations levels to the policy and donor levels, it is not widely shared across organizations at levels beyond operations (see Figure 1 below).

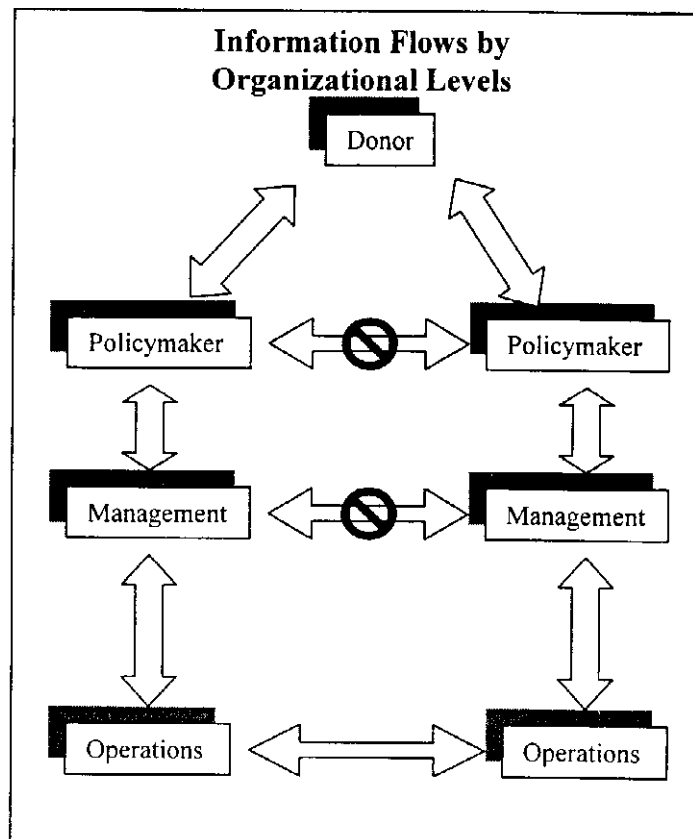


Figure 1.

There is essentially no inter-organizational, systematic approach to disseminating lessons-learned within the mine action community. The norm instead being an “ad hoc” approach to sharing information via standard channels:

- ◆ Conferences
- ◆ Individual correspondence
- ◆ Reports
- ◆ Word of mouth

Some organizations do share and evaluate lessons-learned to a limited degree “in-house.” For example, the U.S. Army’s Center for Army Lesson-Learned evaluates and distributes the lessons-learned from U.S. Army demining operations, but does not isolate them specifically from other operational lessons-learned. These lessons, however, are not (widely) distributed to other mine action organizations, but instead, kept “in-house.”

Recently a mine clearance organization, Meschen gegen Minen (MgM), has created an online form that has been used for sharing information though it is not specifically dedicated to lessons-learned. The majority of lessons that are shared, however, are shared via email and at conferences, where individuals with common interests can discuss their experiences. For example, at the Ljubljana conference much of the discussion was focused on sharing information about the best practices for utilizing Mine Detecting Dogs.

The types of lessons that are shared generally relate to safety and performance issues, with an emphasis placed on positive lessons (those that do not cast the organization in a negative way). There is a great reluctance within the mine action community to share information that may be damaging to the organization or may give its competitors an edge. Moreover, some information is withheld due to proprietary constraints (security classification, business considerations, etc.).

4. Who are the key stakeholders? How will they use lessons-learned?

The key stakeholders in any lessons-learned system for the mine action community can be divided by organizational level into four broad groups:

- ◆ Operations level
- ◆ Management level
- ◆ Policymaking level
- ◆ Donors level

Each group of mine action actors has a different stake in the institution of an overall lessons-learned system. Each group has different requirements regarding lessons-learned information and uses or would use different types of information in different ways.

The **operations** level includes individuals/groups closest to the day-to-day actions of the mine action community (deminers, operations managers, aid workers, etc.). These

individuals have the largest stake in the current lessons-learned system and will probably continue to see their stake grow in any new system. These groups share the bulk of the lessons-learned information currently being shared: safety, performance, and technical issues. This information is generally limited to the operations level and does not make its way up to the higher management, policymaker, and donor levels, except when the results of the lessons-learned are incorporated into SOPs, AARs, or other reports. Lessons-learned information on this level is used primarily to improve safety and performance.

The **management** level is the next level removed from the day-to-day operations, including Home Office and support personnel. Few lessons are shared between different organizations at the management level. Lessons-learned that are examined at the management level generally relate to performance and efficiency issues. Moreover, there is considerable overlap between lessons-learned concerns at the management and operations levels, particularly as they relate to logistics and performance. The primary role of the management level in the lessons-learned process is to protect organizational interests often by limiting or screening lessons-learned for potentially damaging, and/or proprietary information. This has a negative impact on the dissemination of lessons-learned and is one of the primary reasons that lessons-learned are shared mainly at the operations level (see Figure 1).

The **policymaking** level consists of those individuals/groups within an organization whose purview is generally within the mine action community but is not directly related to mine actions operations. For example, this level could include high-ranking United Nations officials who oversee organizations that include mine action programs. This level includes decision-makers that decide where mine action fits into larger goals. The primary consideration at the policymaking level is demonstrating the effectiveness of mine action programs to donors and political constituencies. In this respect, the policymaking level is a consumer of lessons-learned that relate to broader issues such as coordination of activities, how mine action programs can address organization missions and goals, and especially those related to public relations concerns.

The **donor** level consists of agencies and individuals that donate to or sponsor demining activities. Examples include United States government agencies, the United Nations, and private donor organizations. Donor level actors are essentially consumers of lessons-learned information. Few if any lessons are generated at the donor level, however, as nearly all of the support given to the mine action organizations comes from this level. Donors must play a significant role in the institution of a lessons-learned system. The primary consideration of the donor level is effectiveness. Donors benefit from a formal lessons-learned system in that mine action operations become more efficient and effective as organizations share lessons-learned, increasing donors' "bang for the buck."

Figure 2: Key Stakeholders and Their Roles in the Lesson-Learned Process

Actors:	Considerations	Role in LL Process
Operations Level	Safety, Performance	Generator of LL information
Management Level	Performance, efficiency, logistics, organizational considerations	Screens LL information, damage control
Policymaking Level	Demonstrating effectiveness vs. efficiency	Consumer/ evaluator of lessons-learned
Donor Level	“bang for buck”	Consumer of lessons-learned

There are many key stakeholders in the development of a system for sharing lessons-learned (see Figure 2 above). The primary beneficiaries and users are likely to be operations level personnel. The lessons-learned format provides for the easy transfer of technical information between personnel. Despite this apparently limited scope, all organizational levels within the mine action community will benefit from the increased efficiency and effectiveness likely to follow the imposition of a lessons-learned reporting system.

5. What are the strengths and weaknesses of the current system?

The current state of lessons-learned within the mine action community indicates many strengths and weaknesses. The following table presents some of the findings of the Lessons-Learned Workgroup at the World Wide Mine Detecting Dog Conference in Ljubljana, Slovenia (see Appendix C).

“Despite numerous evaluation missions, I am afraid to say that the same mistakes are done again and again and again and...”

--Havard, Bach, GICHD

Current Weaknesses

“File-13”: Much of the information that is generated at the operational level never makes it up to the management or policymaking levels or is simply ignored. This hinders the flow of useful information to policymakers, contributes to operator fatigue, and encourages operators to share information with each other and not with management. This discourages formal information sharing, leaving it up to the discretion of the individual managers at the operations level.

Multiple layers of bureaucracy: Several of the operators and managers interviewed stated that the multiple, overlapping layers of bureaucracy in the mine action community hinder the ability of organizations to share lessons-learned. This is often to poor communication patterns within some mine action agencies as well as turf battles within and among some organizations, which inhibit sharing any information that can be viewed in an unflattering light. Moreover, multiple

requests for information from the same or different organizations can result in fatigue among operators and an unwillingness to share further information.

Current Weaknesses	Current Strengths
<ul style="list-style-type: none"> ◆ “File-13” happens too often ◆ Multiple layers of bureaucracy ◆ Commercial/Political agendas get in the way ◆ Lack of connection to scientific community ◆ Reluctance to admit shortcomings ◆ Language/cultural barriers ◆ Field access to information ◆ Lack of standardized information ◆ Different requirements by different organizational levels and individuals 	<ul style="list-style-type: none"> ◆ Information flows horizontally not vertically ◆ Level of competence and experience in the field ◆ Numerous, worthwhile studies available ◆ Willingness to improve lessons learned <p>Source: Recommendations of the <i>World Wide Mine Detecting Dog Conference, Lessons-Learned Workgroup</i>, Ljubljana, Slovenia, September, 1999</p>

Commercial/Political Agendas: Individual and organizational agendas often hinder the spread of lessons-learned within the mine action community. Private companies and NGOs are often forced to compete with each other and with military demining organizations for mine action contracts from donors. This encourages organizations to withhold as much useful knowledge as possible in order to maintain an advantage over competitors. Commercial and political agendas often create *disincentives* for mine action organizations to share information.

Reluctance to admit shortcomings: Many mine action organizations are reluctant to admit shortcomings, unsuccessful operations, or negative outcomes. Fearing loss of donor support and for reasons listed above, organizations that admit to failed operations and mistakes may have a more difficult time obtaining contracts or funding over competitors who have not made their mistakes public. This discourages the sharing of lessons-learned within the community.

Field Access to information: Among the most frequent complaints voiced at the World Wide Mine Detecting Dog Conference was the inability of field operators to access information. Currently, a large portion of mine action information is published on the Internet, which is difficult to access from field operations. Even where field operations have access to the Internet, connections are expensive and unstable, limiting the amount of time that they can be used. Unless information, known to be useful, is available in a known location, operators are unlikely to expend precious resources (whether in terms of time or money) to gather it. This lack of easy access to information necessitates a reduced level of lessons-learned sharing among field operators. Thus, sharing is essentially limited to safety concerns and some performance issues. A more accessible system would allow users to broaden the scope of lessons-learned issues discussed and shared.

Lack of standardized information: Without standardized information, it is difficult to compare or validate the various reports of different mine action organizations. Since there is no existing universal standard for after-action reports, final technical reports, or other post-operation reports, it is nearly impossible to extract accurate lessons-learned easily and efficiently from the variety of existing literature.

Too many information sources: Similar to the lack of standardized information, the increasing number of clearinghouses has made it difficult for organizations wishing to share lessons-learned to find one that is comprehensive. One of the recommendations of the Lessons-Learned Workgroup was to utilize an existing information clearinghouse, rather than create an additional one.

Cumbersome reporting mechanisms: The formal reporting mechanisms that do exist for lessons-learned are cumbersome and not easily accessed. Currently, aside from lessons-learned by the U.S. Army, lessons-learned are buried within final technical reports, after-action reports, SOPs, and other narrative reports. Compiling and examining these reports tax the resources of the operators and managers who write them and contribute to “paperwork fatigue” making the institution of an additional lessons-learned narrative report unlikely to be widely accepted.

Current Strengths

Horizontal information flows: The major strength of current lessons-learned practices within the mine action community is that information is shared across organizations at the operations level. Particularly in mine clearance organizations, but in others within the mine action community, safety and performance lessons are shared informally from organization to organization at the operations level. This rudimentary system could be the basis for a more formal lessons-learned system.

Abundance of information: Another major strength is the great abundance of information available throughout the mine action community. As noted above, this information often takes the form of after-action reports, technical reports, and SOPs. This profusion of information is one of the greatest resources within the mine action community, despite the difficulties associated with sharing it.

Ease of use: The current system for sharing lessons-learned has the strength of not requiring additional efforts on the part of already overworked operations managers. Since the current system of sharing information is almost entirely voluntary and based upon individual discretion and interaction, the current system has the advantage of quick and easy dissemination methods that do not require users to submit supplemental reports in addition to those already required.

Willingness to improve: A further strength of the current system for sharing lessons-learned is that there is a widespread willingness to improve the situation. Many of the individuals within the mine action community have expressed a willingness to improve the current sharing mechanisms as well as the quality of information shared.

III. Potential Models

Given the current strengths and weaknesses outlined in the previous section, the following four general recommendations apply to any lessons-learned model that is developed.

1. **A neutral lessons-learned clearinghouse should be created.** There was a general consensus among the operators, managers, and donors contacted that a clearinghouse should be established to collect, store, and disseminate lessons-learned for the demining community. This clearinghouse must not be directly associated with any of the current demining agencies, MACs, or NGOs involved in mine action operations, in order to preserve its neutrality and impartiality. Neutrality would ensure that all agencies and individuals within the mine action community are comfortable that the information they do share would not be compromised or changed.
2. **This organization should be an established information clearinghouse.** Another explicit recommendation of many of the mine action individuals contacted and interviewed, as well as of the Ljubljana Workgroup, was that a new organization should not be created. Due to the prevalence of current information clearinghouses, many members of the mine action community agreed that the creation of another clearinghouse would further confuse potential users of the lessons-learned system. Furthermore, by using an existing clearinghouse to house the lessons-learned database, pre-existing methods for dissemination of information can be utilized.

3. **The clearinghouse should contain pared down lessons-learned information distilled from already existing sources.** Due to the cumbersome format of existing lessons-learned information, many operators and managers suggested that lessons-learned be separated from existing reports and stored in a format more conducive to easy access. By eliminating the long narratives and extraneous information in this manner, the clearinghouse would be better able to provide a searchable database of lessons-learned that would allow easy user access, as well as reducing the amount of unusable data collected.
4. **The clearinghouse should not be housed at the United Nations.** Another important recommendation of operators and managers was that the lessons-learned clearinghouse should not be associated with the United Nations. This is due particularly to the current level of bureaucratization apparent in UN mine action operations.

Furthermore, any model that will serve the lessons-learned needs of the mine action community must be equipped to perform the following three functions:

1. Collection of lessons-learned data
2. Validation of lessons-learned data
3. Dissemination of validated lessons-learned data

The following is a discussion of the different possible models for employing a lessons-learned system, broken down into the three primary functions of the clearinghouse.

1. Collection

As stated previously, the mine action community is a diverse group of NGOs, private companies, national military groups, and intergovernmental organizations. Whatever method is used to collect lessons-learned must overcome the great reluctance of these various organizations to share potentially damaging and proprietary information. This method must also distribute control to users rather than a central authority, since any attempt to share information within such a diverse and decentralized issue area must have broad-based support. Finally, any collection method must be capable of collecting and incorporating both existing and future lessons-learned from the many different types of mine action organizations.

Requirements of the Mine Action Community:

- ◆ Voluntary submission of information.
- ◆ Simple, not intrusive collection measures that do not create additional operator fatigue.
- ◆ Timely collection of information.
- ◆ Collection of useful, valid information, excluding misleading and false information.
- ◆ Easily retrievable information.
- ◆ Elimination of dense, narrative reports.

Due to the proprietary nature of much of the information within the mine action community, **a preferred system for collecting lessons-learned would be voluntary.** Voluntary information collection allows system-users to determine what information is useful, rather than any particular organization. In addition, voluntary collection and submission allows users to determine what information is proprietary and confidential, increasing confidence in the system and consequently increasing the participation rate. Moreover, as stated earlier, it is not currently possible to *require* mine action organizations to submit lessons-learned to a central organization without a higher level of donor agreement as to the proper form and method. By instituting voluntary collection procedures there would be little or no need for widespread donor agreement and a potentially larger participation rate than if an attempt were made to make lessons-learned submission (or collection) mandatory. In order to overcome this limitation in the long run, it is possible to include requirements for lessons-learned reporting in the U.N. Standards for Demining as they come up for review.

Moreover, the system should allow for **both passive and active collection of data.** There are two options for collecting lessons-learned from the broad range of organizations related to mine action. Active collection of information, by site visits of neutral, unbiased observers and by designated conferences would be the most effective and accurate way of collecting lessons-learned but has several drawbacks. First, active collection would require a broad consensus for the creation of yet another international agency specifically tasked to collect and validate lessons-learned information. At the present time, no such organization exists, and no existing organization is equipped to collect data from the myriad of mine action organizations. Moreover, the cost of deploying observers to every mine action organization, project, and operation would be substantial, and would likely outweigh the benefits of the resulting shared information. At present this type of active collection system is used by the United Nations Department of Peacekeeping Operations Lessons-Learned Unit (UNDPKO/LL Unit) and to a limited extent by the U.S. Army Center for Army Lessons-Learned (CALL) (see Appendices D and E). This system, though well suited to the UNDPKO due to the limited number of ongoing operations, would have trouble coping with the hundreds if not thousands of ongoing international Mine Action operations. Furthermore, since there is no framework already in existence for this system within the mine action community, this type of collection system would be unable to utilize the current, albeit informal, system for sharing lessons-learned already used by the mine action community, and would be difficult and expensive to create.

A more cost effective and efficient system would be to utilize a passive collection system for gathering lessons-learned information. Passive collection of lessons-learned is currently used by the U.S. Army's Center for Army Lessons-Learned (CALL) in Fort Leavenworth, Kansas. In this method of collection, lessons-learned information is collected by allowing individuals, units, and organizations to submit lessons-learned on their own initiative, without requiring the costly active collection methods. Using passive collection methods would allow individuals and individual organizations within the community to submit only lessons they deem important, eliminating extraneous information and costs. Furthermore, passive collection would overcome the reluctance of

some organizations to share lessons-learned due to proprietary concerns, or concerns over sharing possibly damaging information, by allowing them to share information in a voluntary manner. This method could also be reinforced by combining it with some active collection of information, perhaps in the validation phase (discussed below).

In order to make lessons-learned information easily retrievable, **collection methods should capture only information specifically related to lessons-learned**, and avoid gathering entire SOPs, AARs, and technical reports. By eliminating long narrative reports from the database of lessons-learned, the clearinghouse would provide an easy to access resource specifically for lessons-learned for the mine action community. If desired, an additional system for collecting and disseminating SOPs and AARs could be easily established at the clearinghouse in addition to the lessons-learned system (for an example of multiple collections, see the CALL website at <http://call.army.mil/>).

In order to simplify the voluntary reporting of information and to eliminate the unnecessary collection of narrative reports, a **standard form should be created** and distributed throughout the community as well as on the Internet. This method is currently used by the U.S. Military at the Center for Army Lessons-Learned. A lessons-learned form (see Appendix F) is provided online, and allows users to input data in a standard way. The form is placed on the Internet which allows for timely submission of information, as well as ease of use. This method of collecting lessons-learned also eliminates the need to collect dense narrative reports and allows a lessons-learned database to be searched easily. For this method to be useful to the mine action community, it would be necessary to also distribute the form in some manner other than via the World Wide Web, as some mine action agencies have limited access to the internet (satellite phones, tenuous connections, etc). This would allow individuals at the operations level, who spend a large portion of their time “in-country” to submit lessons-learned. One likely place would be at the MACs (as discussed in the Dissemination phase).

The creation of a standard form for lessons-learned would encourage lessons-learned to be categorized by individuals within the community, without unnecessary intervention and validation by the “clearinghouse.” Moreover, as stated previously, a standard form for lessons-learned would eliminate one of the major weaknesses in the current system: the dense narrative reports that cause user fatigue.

Aside from the online form provided by CALL, there is precedent for a standard reporting form for collecting lessons-learned. The U.S. Army uses a standard form in the field (similar to the CALL online form) (see Appendix G). This form suggests possible options for the properties of the standard form to be used by the mine action community. These properties include:

- ◆ Contact Information
- ◆ Recommended Title/Keywords
- ◆ Situation/Area/Regional Information
- ◆ Type of Operation

- ◆ Observation of Event
- ◆ Discussion of Event
- ◆ Lessons to be learned
- ◆ Recommended Future Action

Using these properties as guidelines for lessons-learned submission will eliminate the need for the clearinghouse to categorize information, provide users with easily searchable, standard information, and considerably simplify the collection and dissemination elements of the lessons-learned system.

An **evaluation period**, prior to program implementation, would be required to validate and refine the standard form. During this period, active collection methods could be used to test, verify, and validate data received from the test forms. This evaluation would include gathering data via the form from several ongoing mine action operations, followed by sending independent teams (from the clearinghouse agency or other NGOs) to those operations to validate the information gathered in the forms. In addition to active validation of the form by onsite visits, a user focus group would be established prior to institution of the system to discuss issues related to the form, and would include representatives from all types of mine action organizations.

A further requirement for collecting lessons-learned information is the selection of individuals and organizations allowed to participate in the sharing of lessons-learned. While the purpose of sharing lessons-learned is to include all valuable information, potential misuse of the system makes it prudent to examine what organizations and individuals are allowed to submit lessons-learned. By allowing anonymous collection of lessons-learned as in the CALL system, the potential exists for individuals not related to the mine action community to submit misleading or false information. There are two potential methods for overcoming this difficulty:

1. **Requiring users who submit information to also submit contact information.** By eliminating the ability to submit lessons-learned anonymously, this method would discourage users from submitting false information. The major potential drawback is that users would also be discouraged from submitting possibly negative or damaging information about their projects and operations. This could be overcome by assuring users that all contact information would be removed before posting the information. Again, this depends on the clearinghouse being a neutral, well-trusted organization.
2. **Allowing anonymous submissions but requiring the clearinghouse organization to validate information.** This method would allow the clearinghouse organization to eliminate information deemed misleading or inappropriate, but would require significantly more trust between the mine action community and the organization due to the subjective nature of the information. Moreover, the costs associated with evaluating and validating every piece of information could potentially be prohibitive.

A final important issue in the collection of lessons-learned information is how to collect and incorporate already existing lessons-learned information into the collection system. Since current and past lessons-learned information resides primarily in long narrative reports and with field personnel, it is unlikely that the standard form suggested above would be successful in efficiently extracting this information and building up a knowledge base. Instead, **existing lessons-learned can be incorporated into the system using an additional modified form.** Perhaps the most efficient method for collecting previous lessons-learned is to distribute a separate form initially, asking more detailed and specific questions about lessons-learned in specified categories in order to build up the initial knowledge base. This form could be distributed during the evaluation phase and contribute to the validation of the standard form. Alternatively, as discussed above, site visits or other active collection measures could be used to collect existing lessons-learned. Finally, the clearinghouse organization could request after-action reports from mine action community members and extract lessons-learned itself. This method would be costly in both time and resources and ties directly into the discussion of validation issues below. A more effective option would substitute preexisting SOPs, technical reports, and after-action reports for the past and current lessons-learned, while collecting additional lessons-learned in the manner prescribed above.

2. Validation

Validation issues comprise the core of objections to the establishment of a lessons-learned clearinghouse. If lessons-learned are to be collected passively, i.e. user submissions, rather than active collection, there is a potential for the submission and subsequent publishing of false, misleading, or inappropriate information. Moreover, users are unlikely to rely on lessons-learned that are submitted if they have not been properly validated.

Requirements of the Mine Action Community:

- ◆ Neutral, unbiased validation
- ◆ Inclusion of all valid demining lessons-learned
- ◆ Exclusion of false, misleading, or unhelpful information
- ◆ Limited validation responsibilities for the clearinghouse organization
- ◆ Timely reporting of lessons-learned

In order to provide reliable and valid lesson-learned information to the Mine Action community, there is a range of options:

- ◆ No validation (all information is collected regardless of its merits).
- ◆ Self-policing validation (users provide self-validation by refuting inaccurate data)
- ◆ Clearinghouse validation (the clearinghouse validates all submitted information before publication)
- ◆ Annual review (members of the mine action community validate information at an annual conference on the subject)

- ◆ Active sampling (the clearinghouse or other international body validates the information by selectively auditing data)
- ◆ Active collection (clearinghouse actively collects information from all mine action operations)

No Validation:

By not checking any of the information for reliability or validity, the system for collection lessons-learned could fall into disuse, particularly if there is not the desire within the community to use such a system. The likely results of this method of handling validity questions are that the mine action community would not trust the information and consequently the database would not be used. The benefits of this method include reducing the load on the clearinghouse agency and consequently, the costs.

Self-Policing validation:

This method for validating lessons-learned information would allow all information to be submitted and posted, while misleading information would be checked and invalidated by subsequent submissions from others within the community. This method would require a great deal of active participation on the part of the mine action community. Interest in accurate information would have to exist for this method to be effective, however, all indicators point to widespread interest on the part of the mine action community.

Clearinghouse validation:

Requiring validation at the clearinghouse level would limit the subjective validation of the previous two proposals, but would increase the costs associated with validation. It would require knowledgeable, neutral, and unbiased staff to perform validation tasks. This could open the clearinghouse up to attacks of bias and partiality, cause mistrust between the mine action community and the clearinghouse, as well as limit the types and amounts of lessons-learned information stored. Furthermore, this option would increase the cost of validation without a significant improvement in the validity and reliability of the information.

Annual Review:

An annual review of lessons-learned data by mine action community members would provide a greater level of evaluation for information stored at the clearinghouse. A working group could be brought together annually to provide feedback to the clearinghouse as well as validate the data stored there. This option would be costly and time consuming for members of the community and would place an unnecessary burden on users. Used in conjunction with the self-policing method above, this option could provide helpful feedback to the clearinghouse and would help address problems that might arise from limited voluntary participation.

Active sampling:

Using a limited active collection approach to validating information (as recommended for the evaluation phase above) is another way to validate lessons-learned information. Users, the clearinghouse, and/or other neutral mine action organizations could perform validity checks of existing lessons-learned information by conducting site visits,

interviews, and/or conference to determine the usefulness of information contained in the clearinghouse. This option would be more costly than many of the preceding options but would provide a greater test of validity than an annual review. The potential pitfalls of this option include determining who would perform site visits and interviews, which and how many sites would be visited, as well as the costs associated with this type of sampling.

Active collection:

A final option for validating lessons-learned information is to use active collection of information. As discussed above, the costs of this option are likely prohibitive. Furthermore, it is unlikely to be supported by organizations within the community, due to the lack of control they could exert over the potentially negative findings of the collecting organization.

Type of Validation	Pro's	Cons
No Validation	<ul style="list-style-type: none"> ♦ inexpensive ♦ easy 	<ul style="list-style-type: none"> ♦ potential for inaccurate information
Self-policing	<ul style="list-style-type: none"> ♦ accurate ♦ meets user defined needs 	<ul style="list-style-type: none"> ♦ creates more work for users ♦ may not evoke uniform participation
Clearinghouse	<ul style="list-style-type: none"> ♦ reliable results due to one reviewer 	<ul style="list-style-type: none"> ♦ expensive ♦ potential for inaccurate information
Annual Review	<ul style="list-style-type: none"> ♦ annual conferences already the norm ♦ allows 'regular' review 	<ul style="list-style-type: none"> ♦ some recurring costs in time and money
Active Sampling	<ul style="list-style-type: none"> ♦ moderately accurate 	<ul style="list-style-type: none"> ♦ less expensive than active collection, but more expensive than self-policing
Active Collection	<ul style="list-style-type: none"> ♦ very accurate 	<ul style="list-style-type: none"> ♦ very expensive ♦ potential for user resentment

In short, the type of validation method has a significant impact on the type and nature of lessons-learned information stored in the clearinghouse. With active collection, the amount of information is likely to be significantly lower than with other collection/validation methods since organizations are unlikely to permit collection of data from their operations due to the potentially negative findings and their consequences. It is necessary for the mine action community to have an active stake in the lessons-learned process for it to be of help to them in their operations. By utilizing the "self-policing" method, the mine action community will have a stake in the system, as well as control over its content. This control over content will ensure that the information stored will be of a useful nature, and will be less subjective than any other method of validation. This method can be further strengthened by combining it with the annual review option. This

would not significantly increase costs, while limiting some of the problems associated with limited voluntary participation if the “self-policing” option were used alone.

A second issue regarding the validation of lessons-learned information is whether or not to publish the source of information. In order to overcome the reluctance of the mine action community to submit lessons-learned that describe negative, unsuccessful, or failed operations **the data should be sanitized**. This reluctance is not unfounded. Organizations that share information about negative or unsuccessful operations face fears of the withdrawal of financial support of donors. For this reason, information about the source of the information should be withheld from publication. At the same time (as discussed previously), it is necessary to retain that information at the clearinghouse level, in order to limit the submission of false or misleading information.

Finally, **the role of the clearinghouse within the validation process should be to cleanup information but not to edit its content**. If the option of no validation, self-policing validation, or annual review were chosen, the role of the clearinghouse would be simply to clean the information submitted by users. No selective editing or censorship would be required. The role of the clearinghouse would be to publish information with no judgement about its validity or reliability. The clearinghouse would have full control of formatting and technical issues. In order to maintain the integrity of the information, the clearinghouse may return the “ready to publish” version of the lessons-learned to the user if requested.

3. Dissemination

Many technical aspects to dissemination have been examined, as well as several substantive issues. Moreover, the diverse nature of the mine action community (from Victim Assistance groups to Mine Clearance organizations, operators in the field to financial donors) necessitates an approach to dissemination that will reach the broadest range of community members. Dissemination is essentially comprised of two broad phases:

1. Storage
2. Publishing

When distributing information to the mine action community it is important to understand the diverse, changing nature of the community. For that reason, any method of disseminating lessons-learned throughout the community must be flexible, using multiple approaches.

Requirements of the Mine Action Community:

- ◆ easy access to lessons-learned information
- ◆ access for field personnel
- ◆ regular, frequent updates
- ◆ international distribution to overcome language and distance issues
- ◆ timely dissemination of lessons-learned

Storage:

The variety of options for storage of lessons-learned can be limited to electronic and print-based storage. For the purposes of the mine action community, **electronic storage is the best option**. Due to the international nature of mine action, the large number of countries, programs, and languages involved, lessons-learned information must be widely available in a timely manner. Print-based storage is not equipped to transport information in a timely fashion, while electronic storage is more versatile and can be converted to printed form rapidly. Electronic storage further allows for easy electronic submission of lessons-learned information and can accommodate hardcopy submissions as well. Furthermore, electronic storage can better accommodate the large number of small pieces of information that this system would generate.

The actual, technical form of the electronic storage should be decided by the clearinghouse organization but would likely take the form of a standard database file. This method would facilitate the transfer of lessons-learned information from an online submission form to user-friendly output, where organizations could access its contents from the Internet.

Moreover, as noted in the earlier discussion of collected issues, lessons-learned should be distilled from the lengthier reports in which they currently reside and stored separately in a searchable database.

Publishing:

With the number of mine action organizations and individuals that use the Internet increasing, **the primary method for disseminating lessons-learned information should be via the World Wide Web**. This approach has two major benefits. First, by distributing lessons-learned online, the information can be categorized and placed in a searchable database, allowing users to find information they require in a timely manner. Second, by posting information on the Internet, the primary method of dissemination would be passive, hence cheaper. This would eliminate the need to send all of the lessons-learned information to each mine action organization, instead allowing them to find the information they require individually. This practice is used by the Center for Army Lessons-Learned, the AFLOAT Naval Safety Center and other lessons-learned organizations.

In order to make information available to the number of organizations and individuals, **lessons-learned should be disseminated online and in hardcopy**. By publishing information online and in hardcopy, the clearinghouse would make lessons-learned available to those organizations and individuals, particularly those “in-country,” without reliable or cheap Internet access. One of the major issues raised about lessons-learned dissemination at the World Wide Mine Dog Conference Panel on Lessons-Learned was that individuals at the operations level, often do not have reliable or cheap internet access, often having to rely on satellite phones with low transfer rates and high costs. This problem is partially overcome by having one identifiable clearinghouse and website.

Organizations will not have to spend inordinate amounts of time searching for the information they need, thus reducing costs of accessing the Internet from the field. In addition, lessons-learned should be distributed in hardcopy form to those who request it, further overcoming the Internet access limitations in the field.

Another way to facilitate the distribution of lessons-learned to operations level personnel is to **distribute lessons-learned to all of the Mine Action Centers (MACs)**. Since many organizations in the mine action community are required to check-in with the MACs before beginning in-country operations, they would be an ideal place to station lessons-learned information, particularly “country specific” lessons-learned. This option would also allow for the placement of hardcopy information as well as regional access to lessons-learned.

In addition to publishing information online in a searchable database format and distributing lessons-learned to the MACs, **a quarterly bulletin should be disseminated** throughout the community. This bulletin would contain “highlights” from the lessons-learned gathered up to that point. This method of publication would facilitate the distribution of lessons-learned throughout the community, without requiring users to seek out the information. Many organizations that distribute lessons-learned use this format, including the Center for Army Lessons-Learned and the United States Marine Corps. Mine action community members could sign-up for this service, which would be disseminated by email, LISTSERV, or some other electronic distribution system. This method would limit the costs associated with publishing the bulletin in printed form, though it could be added later if demand necessitated it.

IV. Conclusions and Recommendations

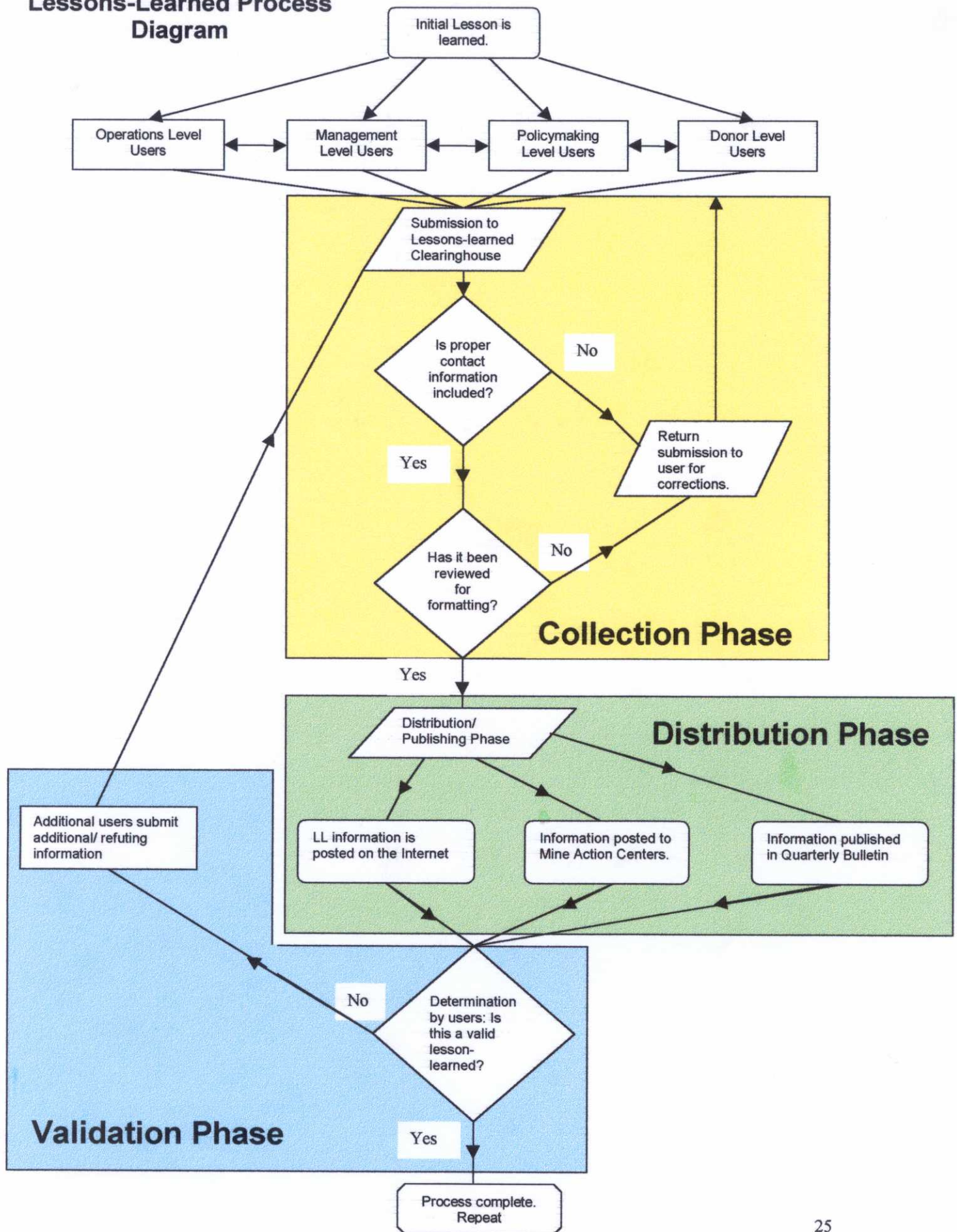
The current informal methods of collecting and distributing lessons-learned information within the mine action field do not meet the needs of the community. By all accounts, costly, preventable mistakes are being made that limit the efficiency and effectiveness of mine action operations. Consequently the development of a formal system for sharing mine action lessons-learned would be of tremendous benefit to the community. Any lessons-learned system must be flexible enough to handle lessons-learned from the various organizational levels associated with the numerous ongoing and past operations of countless international organizations in a variety of specialties within the field of mine action. The following is a summary of the proposed model:

Proposed Model

1. *Utilize one (and only one) existing Clearinghouse.*
 - Prevents confusion and costs associated with the creation of many information sources within the mine action community.
 - Builds/maintains user confidence.
2. *Use a neutral Clearinghouse.*
 - Fosters trust within the mine action community.

- Instills confidence that user anonymity will be protected.
 - Encourages accurate, unbiased reporting of useful and potentially sensitive information.
3. *Collect distilled lessons-learned.*
 - Allows users to retrieve information quickly and easily.
 - Eliminates problems and extraneous information associated with long reports.
 - Eases the reporting burden of users and the processing burden of the Clearinghouse.
 - Does not preclude the additional collection of other mine action information including SOPs and AARs.
 4. *Use voluntary submission/collection methods.*
 - Allows end-users to determine the importance of information.
 - Encourages individuals from all organizational levels to participate.
 - Does not require collection from all mine action organizations.
 5. *Use a Standard Form for reporting.*
 - Simplifies lessons-learned reporting from the field.
 - Limits “paperwork fatigue” of operators.
 - Categorizes and standardizes information for easier distribution.
 6. *Collect previous/existing lessons-learned with an additional form.*
 - Rapidly increases initial knowledge base.
 - Information can be used to validate and evaluate proposed Standard Form.
 7. *Collect information primarily via the internet/email.*
 - Allows for timely collection and dissemination of information.
 - Is not exclusive of other collection methods.
 8. *Utilize “self-policing” validation techniques with periodic review.*
 - Encourages continuous community interaction.
 - Less costly (in time and money) than other validation methods.
 - Highly accurate and self-correcting.
 - Limits the role of the Clearinghouse to data formatting and sanitation.
 9. *Distribute lessons-learned via the Internet and hardcopy to Mine Action Centers.*
 - Spans the broadest section of the mine action community.
 - Internet publication is cheap and easy to access.
 - Hardcopy allows field operators without Internet capabilities to access lessons-learned information.
 10. *Publish a quarterly journal of “newest” lessons-learned via the Internet.*
 - Provides for timely dissemination of information.
 - Limits the need for users to seek out lessons-learned information

Lessons-Learned Process Diagram



List of Attachments

Appx.	Contents
A.	World Wide Mine Detecting Dog Conference List of participants at the World Wide Detecting Dog Conference, Ljubljana, Slovenia (13 September to 15 September 1999)
B.	Mine Clearance Standards Users Focus Group List of participants at the Mine Clearance Standards Users Focus Group sponsored by the <i>Geneva International Center for Humanitarian Demining</i> (27 October to 29 October 1999)
C.	Workgroup 2: Lessons-Learned Recommendations Recommendations of <i>Workgroup 2: Lessons-Learned</i> at the <i>World Wide Mine Detecting Dog Conference</i>
D.	UNDPKO Lessons-Learned Unit Website Excerpts from the <i>United Nations Department of Peacekeeping Operations, Lessons-Learned Unit</i> website
E.	CALL Website Excerpts from the <i>U.S. Army's Center for Army Lessons-Learned</i> website
F.	Online Lessons-Learned Observation Form Form used by the <i>U.S. Army's Center for Army Lessons-Learned</i> to collect lessons-learned information on their website
G.	Lessons-Learned Observations Form used by the <i>U.S. Army's Center for Army Lessons-Learned</i> extracted from: <i>After-Action Report for Humanitarian Demining Training Program (Namibia)</i>
H.	Additional Lessons-Learned References Additional online, general lessons-learned references, unrelated to mine action

Appendix A

WORLD WIDE MINE DETECTING DOG CONFERENCE

List of participants at the **World Wide Mine
Detecting Dog Conference**

Ljubljana, Slovenia

13 September 1999

to

15 September 1999

World Wide Mine Detecting Dog Conference

Participant List

Ljubljana, Slovenia

13 September to 15 September 1999

PREFIX	FIRSTNAME	LASTNAME	ORGANIZATION
Col.	Mark W.	Adams	US Department of State (PM/HDP)
Mr.		Amanullah	Mine Detection & Dog Center
Capt.	Gunvald	Anderson	Humanity Dog
Mr.	Bojan	Babic	Ministry of Defence
Mr.	Haavard	Bach	Geneva Int'l Centre for Humanitarian Demining
Mr.	Perry	Baltimore	Marshall Legacy Institute (MLI)
Ms.	Patricia	Banks	TA Commission for Demining
Mr.	Eddie	Banks	TA Commission for Demining
Mr.	Dennis	Barlow	Mine Action Information Center (MAIC)
Mr.	Robert	Beecroft	US Department of State (PM/AS)
Mr.	Taha Hachim	Bergou	Chad National Demining Committee (HCND)
Mr.	Gary	Bloesl	Military Assistance Group - Thailand
Mr.	Steve	Brown	MineClear International
Mr.	James E.	Brown	USASOC (DCSOPS)
Mr.	Paul	Brown	RONCO Consulting Corp.
Mr.	Chris	Bryson	Canadian International Demining Centre (CIDC)
Mr.	Paul C.	Bunker	Mine Detection Dog Training, Canine Div
LTC	Jorg	Busch	German Federal Foreign Office
Ms.	Sally	Campbell	Huntington Associates
Mr.	Stefan	Carlsson	Norwegian People's Aid
Mr.	Damir	Cemerin	Mungos
Mr.	Stephen	Chasukwa	NPA-Mozambique
Dr.	Al	Childress	USCENTCOM/CCJ5-0 (Demining)
Mr.	Carl	Chirgwin	SGS UK Ltd

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Mr.	John A.	Clayton	Defence Evaluation & Research Agency (DERA)
Mr.	George	Conrad	RONCO Consulting Corp.
Mr.	Alistair	Craib	Baric Consultants
Mr.	Jacky	D'Almeida	UN/ADP National Demining Program
Ms.	Sarah	Daywalt	Dept of Health Sciences - JMU
Mr.	Rick	Doull	NOTRA Environmental Services, Inc.
Mr.	Tomislav	Drolc	Ministry of Defence-Republic of Slovenia
Mr.	Moses	Dube	NPA-Mozambique
Col. (Rtd)	Lionel	Dyck	Mine-Tech
Mr.	Stephen	Edelmann	RONCO Consulting Corporation
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Mr.	Jamilhid	Gasumov	Azerbaijan National Agency for Mine Action
Mr.	Chistiaan "Burg"	Geel	Stiftung Menschen gegen Minen (MgM)
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Mr.	Mohammed	Ismail	Mine Detection & Dog Center
Mr.	Mirko	Ivanusic	Hrvatski centar za mine
Mr.	Peter	Jager	Ministry of Defence - Republic of Slovenia
Mr.	Uros	Jama	Ministry of Defence - Republic of Slovenia
LtCol	Iain	James	HQ SFOR
Mr.	Mirko	Jelenic	Slovenian Red Cross
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Mr.	Andreas	Knackstedt	Federal Bureau of Investigation, Germany
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Mr.	Mirsad	Krvavac	BH Demining
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Mr.	Daniel	Lioznyansky	
Mr.	Rade	Ljubojevic	RS MAC
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Mr.	Joe	Lokey	Mine Action Information Center (MAIC)
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Mr.	Lance	Malin	Handicap International
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Mr.	Ron	Mistafa	Canine Countermine
Mr.	Ales	Mizigoj	Medex International
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Mr.	Andrej	Muhvic	Ministry of Internal Affairs
Dr.	Gunter	Mulack	German Federal Foreign Office
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MAJ	Herve	Petetin	Geneva International Centre for Humanitarian Demin
Mr.	Bostjan	Pirc	Interakcija, d.o.o.
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Mr.	Franco	Ricco	INTERSOS
Mr.	Michael	Ritchie	Defense Security Cooperation Agency (DSCA/HA-D)
Mr.	Michael	Robinson	UXB International
Mr.	Phillip	Rowe	UN Mine Action Northern Iraq (UNOPS)
LtCol.	Celeo	Salazar-Lloreda	Army Engineer Corps (SINGE)
Mr.	Chuop	Samnang	Cambodian Mine Action Center (CMAC)
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Mr.	Richard	Schmidt	HELP UNHCR
Mr.	Kip	Schultz	Mechem Consultants
Mr.	Ted	Seay	U.S. Embassy Slovenia
Mr.	Saban	Sejfic	Federation Mine Action Centre
Mr.	Primoz	Seligo	Slovenia International Trust Fund (ITF)
Mr.	Ramiz	Selimovic	Federal Ministry - Physical Planning & Environment

PREFIX	FIRSTNAME	LASTNAME	ORGANIZATION
Mr.	David	Sendra Dominech	Universitat Autònoma of Barcelona
Mr.	Alan	Sims	Karenswood (International) Ltd.
Mr.	Anton	Sinkovic	BH Mine Action Center
Mr.	Charles P. (Chuc	Smith	ECI K-9 Team
Dr.	Saad	Soliman	University of Western Australia
Mr.	Ben	Sternberg	MAAVARIM-Civil Engineering Ltd.
Dr.	Steve	Stewart	Dept of Health Sciences - JMU
Mr.	Robert	Strazisar	Slovenian International Trust Fund
Cpl.	Elle	Tamm	Tartu Rescue Company
Col.	Roberto	Tandazo	Ecuador Mine Action Center - Demining Brigade
Mr.	Robert D.	Thompson	Office of the Joint Chiefs of Staff (J-3SOD)
Mr.	Roman	Tkavc	Ministry of Internal Affairs
Mr.	Roger	Tredwell	Mine Detection Dog Training
Mr.	Bogo	Trope	Ministry of Defence - Republic of Slovenia
Mr.	Johannes L. (Jan)	Truter	BRZ International Limited
Mr.	Rocky	van Blerk	UNMAP Croatia
Mr.	J. Theo	van Dyk	Mechem Consultants
Mr.	Alex	van Roy	Mechem (BiH)
Mr.	J.	van Zyl	Mechem Consultants
Mr.	Mao	Vanna	Cambodian Mine Action Center (CMAC)
Ms.	Suzana	Vucanovic	Detektor
Mr.	Joe	Ward	USASOC (DCSOPS)
Col. (Ret)	Sven	Wergård	Swedish Working Dog Association
Dr.	Terry	Wessel	Dept of Health Sciences - JMU
Mr.	Michell	Westerman	Cambodian Mine Action Center (CMAC)
Lt.	Jan-Olaf	Widar	Swedish EOD, Demining & Mil Engineering Centre
Ms.	Wang	Yanmei	Chinese Embassy to the Republic of Slovenia
Ms.	Tatiana	Zigon	Slovenian Red Cross

PREFIX	FIRSTNAME	LASTNAME	ORGANIZATION
Mr.	Radosav	Zivkovic	NGO Mine Action-Stop Mines
Mr.	Zeljko	Zuljevic	Mungos

Appendix B

MINE CLEARANCE STANDARDS USERS FOCUS GROUP

List of participants at the *Mine Clearance Standards
Users Focus Group*

Sponsored by:
Geneva International Centre for Humanitarian Demining

James Madison University
Harrisonburg, VA

27 October 1999
to
29 October 1999

Mine Clearance Standards User Focus Group Meeting Participant List

Harrisonburg, VA
27 October to 29 October 1999

First Name	Last Name	Organization
Havard	Bach	Geneva International Center
Dennis	Barlow	Mine Action Info Center
Steve	Brown	RONCO
Matt	Craig	Landair Int'l Ltd.
Hendrik	Ehlers	MgM
Suzanne	Fiederlein	Mine Action Information Cent
David	Hewitson	Greenfield Consultants
Alan	Jones	NATO
Bob	Keely	CMAC
Tim	Lardner	Cranfield University
Dave	Lundberg	RONCO
Mike	McAlpine	Cranfield University
Alastair	McAslan	Geneva International Center
Dave	McCracken	Survey Action Center
Hemi	Morete	UNMAS
Chris	Pearce	Mine-Tech
Jim	Prudhomme	UNMAS
Tom	Smith	DSCA
Andy	Smith	Consultant
J.J.	van der Merwe	UNOPS
George	Zahaczewsky	OASD-SOLIC

Appendix C

WORKGROUP 2: LESSONS-LEARNED RECOMMENDATIONS

Workgroup 2: Lessons-Learned
Presentation of recommendations at the
*World Wide Mine
Detecting Dog Conference*

Ljubljana, Slovenia

13 September 1999

to

15 September 1999

Report from Work Group 2

Identifying and Using MDD Program Lessons-Learned

Goal:

- To determine the best **sources** of lessons-learned, discuss the **validation** of information, **reluctance** to release experiences, and examine the possibility of a global “**clearinghouse**” of MDDS lessons-learned, best practices, and other empirical data.

Current State of Knowledge on MDDS Lessons-Learned

- Information is “Everywhere” and “Nowhere”
- Informal: word of mouth, meetings, conferences, reports, and studies.
- General lack of knowledge on all levels, organizational, managerial, and operational
- Reluctance to share information

Current Weaknesses

- “File-13” happens too often
- Multiple layers of bureaucracy
- Commercial/Political agendas get in the way
- Lack of connection to scientific community
- Reluctance to admit shortcomings
- Language/cultural barriers
- Field access to information
- Lack of standardized information
- Different requirements by different organizational levels and individuals

Current Strengths

- Information flows horizontally not vertically
- Level of competence and experience in the field
- Numerous, worthwhile studies available
- Willingness to improve Lessons-Learned

Understanding MDD Limitations

- On all organizational levels, internal and external, MDD issues are viewed and handled from within different frames of reference
 - measurement of success
 - cost effectiveness
 - operational performance
 - operational requirements
- Varies from country to country, organization to organization.

Proposed Improvements

- Improving the Current Process:
 - develop reporting categories
 - develop reporting formats
 - realistic reporting schedules
 - validation issues: by whom?
 - define users and their requirements
 - establish reference library for publications, papers, and reports

Proposed Improvements

- Establish a “clearinghouse”
 - do not create a new organization, use one already in existence
 - “keeper” must be neutral, unbiased, and trustworthy
 - timely dissemination of information, both electronic and hard copy
 - Validation issues...?

Benefits

- Collecting and disseminating information regarding “best practices,” successful programs, and less successful programs will be beneficial with regards to...
 - increase in operational effectiveness
 - safety
 - donor confidence
 - realistic cost/schedule planning for future programs

Appendix D

UNDPKO LESSONS-LEARNED UNIT WEBSITE

Excerpts from the *United Nations Department of Peacekeeping Operations, Lessons-Learned Unit* website.

Available at:

<http://www.un.org/depts/dpko/lessons/llu2.htm>

The Lessons Learned Unit

1. [Reaching the Lessons Learned Unit](#)
 2. [Organization/Staff](#)
 3. [History and Activities](#)
 4. [Research Areas](#)
-

1. REACHING THE LESSONS LEARNED UNIT

Address: Lessons Learned Unit, One United Nations Plaza, Room S-927, New York, N.Y. 10017, USA.

Fax: (212) 963-1813

Email: peace-keeping-lessons@un.org

2. ORGANISATION/STAFF

The Lessons Learned Unit is made up of the head of the Unit, a Coordination Officer, two Military Officers, two Research Analysts, a Research Assistant and an Administrative Assistant. The Unit also makes use of outside consultants from time to time.

3. HISTORY AND ACTIVITIES

Background

The Lessons Learned Unit of the Department of Peacekeeping Operations was set up in April 1995 in response to a need for a structured mechanism to collect and analyse information on the various missions being fielded by the United Nations and to recommend ways to improve their effectiveness.

Although the Department did have an inherent capacity for lessons learned from past operations, the Unit was to respond to the need for a lessons-learned capability that had a systematic approach and was analytical rather than anecdotal. The Unit was to be a permanent mechanism that would act as both a repository of individual and organizational experience and an analytical core for the planning, management and execution of peacekeeping missions.

Objectives

- To draw lessons learned from peacekeeping missions;
- To recommend the application of lessons learned from peacekeeping missions to ongoing and future operations;
- To monitor the application of these recommendations and lessons learned;
- To develop the Lessons-Learned Unit into the United Nations institutional memory on

- peacekeeping operations; and
- To make this institutional memory easily available to officers, at Headquarters and in the field, involved in all aspects of peacekeeping missions, including their planning, managing and support.

Methodology

In working towards its goals, the Unit seeks to avoid duplicating similar work being done within the United Nations or elsewhere. Instead, it attempts to bring these separate initiatives together into a common forum.

The methodology of the Unit's research and analysis includes gathering information from primary sources, such as interviews with mission and Secretariat personnel, representatives of specialized agencies as well as political actors.

Lessons-learned teams visit mission areas to gather first-hand information for mid- and end-of-mission assessments.

The secondary sources of information include published material, media analysis and reportage, evaluation reports of peacekeeping operations by independent experts and governments and end-of-tour reports by key personnel, both in the field and at Headquarters. The Unit also makes use of empirical analysis of responses received to questionnaires developed for former and current mission personnel and thematic workshops and seminars.

Lessons learned studies must be of immediate relevance and practical utility to the work of the Department and of the United Nations in general. Accessibility of such information is an important element for implementation of lessons learned. To this end, the Lessons-Learned Unit has set up a Resource Centre consisting of books, documents, audio and video material for easy access and retrieval.

4. RESEARCH AREAS

The Lessons-Learned Unit is in the process of collecting and analysing information on the following peacekeeping missions:

- Former Yugoslavia: The United Nations Protection Force (UNPROFOR)
- Angola: United Nations Angola Verification Mission (UNAVEM)

*Prepared by the Department of Peacekeeping Operations
Not an official document of the United Nations
Last updated: **November 1999***

[Main Page](#) | [UN Home Page](#)

Appendix E

CALL WEBSITE

Excerpts from the *U.S. Army's Center for Army Lessons-Learned* website:

Available at:

<http://call.mil.gov/call/handbook/97-13/foreword.htm>
<http://call.mil.gov/call/handbook/97-13/history.htm>
<http://call.mil.gov/call/handbook/97-13/intro.htm>
<http://call.mil.gov/call/handbook/97-13/lsnslrnd.htm>
<http://call.mil.gov/call/handbook/97-13/actops.htm>
<http://call.mil.gov/call/handbook/97-13/ctcbrnch.htm>
<http://call.mil.gov/call/handbook/97-13/infosys.htm>
<http://call.mil.gov/call/handbook/97-13/research.htm>
<http://call.mil.gov/call/handbook/97-13/gateway.htm>
<http://call.mil.gov/call/handbook/97-13/acknow.htm>



FOREWORD

This handbook is a guide to the procedures and programs available from the Center for Army Lessons Learned (CALL) to support the soldier. Included in this handbook is an explanation of the CALL Database (CALLDB). The CALLDB enables the armed services and DOD employees to consult the Army's corporate memory with unprecedented thoroughness, speed, and effectiveness. The CALLDB promotes, maintains, and distributes on line the Army's electronic, multimedia archives for post-Vietnam contingency operations, peacetime preparation for war, and planning for the future.

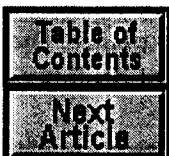
Today's Army is rapidly evolving into a CONUS-based, Force Projection Army with the potential for far-reaching, diverse mission requirements. The lessons learned implications are clear. We must capitalize on every single opportunity to learn, based on what we do, and how we do it. We must maximize our potential to execute our ever-diversifying missions right the first time.

If you are designated to deploy, make one of your first requests for information to CALL. CALL possesses a unique capability to assist your unit. By using lessons from those who precede us and incorporating many of them into the CALLDB, we can be combat- and contingency-ready prior to deployment. Only then can we demonstrate that lessons are really learned.

When you do go, we will go with you. The CALLDB lessons learned system described in this handbook explains how, working with you, CALL can expeditiously provide lessons to your unit and to the U. S. Army via the CALL Homepage or in hard copy.

When your unit identifies relevant lessons or information, please share them with the rest of the U.S. Army by contacting CALL at DSN 552-2255/3035; Coml (913) 684-2255/3035, FAX DSN 552-9564; Coml FAX (913) 684-9564. Comments concerning this handbook should be addressed to the Center for Army Lessons Learned, ATTN: ATZL-CTL, Bldg 50W, 10 Meade Avenue, Fort Leavenworth, KS 66027-1350. Our E-mail address is: call@leav-emh1.army.mil and our WWW home page is: <http://call.army.mil/>

Michael Hiemstra
COL, FA
Director, Center for Army Lessons Learned



[History of the Army's Lessons Learned System](#)

HISTORY OF THE ARMY'S LESSONS LEARNED SYSTEM

By the mid-1980s, the Army leadership realized that despite the huge investment in the National Training Center (NTC), there was no method in place to capture the warfighting lessons coming from that training center in the midst of the unforgiving Mojave Desert. Concurrently, the aftermath of Operation URGENT FURY demonstrated that the services, including the U.S. Army, had no system to capture combat lessons.

To fill that void, the Army created the Center for Army Lessons Learned (CALL) in 1985 at Fort Leavenworth, KS. CALL's initial publications focused on successful tactics, techniques and procedures (TTPs) from the NTC, as CONUS units vigorously trained for this desert combat.

The success in forging the Army heavy forces into an effective combat machine led to the creation of companion Combat Training Centers (CTCs). The Joint Readiness Training Center (JRTC) for light forces at Fort Chaffee, AR (now Fort Polk, LA), the Combat Maneuver Training Center (CMTC) at Hohenfels, GE, and the Battle Command Training Program (BCTP) at Fort Leavenworth, KS, for division and corps commanders and staffs all came into existence. As the CTC concept grew and evolved, so did the focus of CALL.

Recognizing the need to quickly react in the event of combat, CALL developed a collection process. This process afforded the U.S. Army the opportunity to also collect lessons from anywhere it executes a combat mission. Thus, when Operation JUST CAUSE began in Panama in December, 1989, CALL conducted its first combat collection effort. AR 11-33, *Army Lessons Learned Program: System Development and Application*, establishes a system for collecting and analyzing field data, and disseminating, integrating, and archiving lessons from Army operations and training events (CTCs).

The system employed by CALL consists of several basic components: PLAN, COLLECT, ANALYZE, PUBLISH, DISTRIBUTE, AND ARCHIVE. Exercising each of these components in a systematic process results in lessons and information that provide an intelligent approach to operations. The test for CALL and the entire lessons learned system is whether it can help soldiers and units perform their mission right the first time, regardless of the mission.

How are Lessons Learned?

At this point, it is very important to understand the definition of a "lesson learned." A lesson learned is validated knowledge and experience derived from observations and historical study of military training, exercises, and combat operations. Thus, for CALL, the first step is to observe the Army's warfighting to determine what behavior needs to be changed. Ideally, "warfighting" lessons can be learned at one of the CTCs, where mistakes do not result in casualties.

Changes to behavior may result in either stopping something we have been doing, doing something different from before, or doing something new that we have not done before. When the Army conducts any mission, its composite activities constitute behavior. That behavior, however, can be broken down into missions, tasks, and subtasks -- both individual and collective -- just as our training doctrine explains. The concept of changing the Army's behavior sounds formidable. However, viewed in the context of dealing with the smaller, relevant parts, behavioral changes can be made.

INTRODUCTION TO CALL

The introduction in this handbook should assist you in understanding CALL and how you individually or as a unit can participate in the lessons learned system. The introduction explains each of the divisions in CALL.

The **Lessons Learned Division (LLD)** consists of two branches: Actual Operations and the Combat Training Center (CTC) Branch. The information presented on the Lessons Learned Division explains the Combined Arms Assessment Team (CAAT)-Analyst relationship and the support this division provides to the entire collection process. Collection efforts must be supported by an analytical effort that provides closure (products) to both passive and active collection. To be beneficial to the Total Army, knowledge must be shared and disseminated. This section describes the communications link that is maintained on a 24-hour basis when collectors are involved in a contingency operation. It also explains the need to support the link with ongoing review, research, and feedback of raw observations.

The segment on the **Actual Operations Branch** provides information on the collection process by explaining several phases. The phases consist of mission analysis and planning, deployment and unit linkup, collection operations, and redeployment product development. This section also presents collection plan development, functions, and composition.

The **Combat Training Center (CTC) Branch** is a combination of collection and analysis resources. It focuses on collection, both active and passive, from the four CTCs -- NTC, JRTC, CMTC and the BCTP. The products produced by this division are of value to units preparing to participate in a CTC rotation or a real-world operation. Whereas contingency operations are sporadic and do reach an end state, the CTCs are ongoing training environments that replicate combat operations short of real conflict. Products developed by the CTC Division serve as an assessment tool for units. The products highlight tasks and performance trends to assist units in focusing their training. By identifying problem areas, the various products provide the commander with a useful tool in establishing training priorities. The types of products produced by this division are listed in the CTC section.

The **Information Systems Division (ISD)** ties all of the efforts of the organization together and is the focal point for electronic collection, analysis, dissemination, and archiving of lessons and information. The mission of the ISD is to facilitate data collection and processing and support the immediate dissemination of lessons and information to the Total Army by providing on-line access. A number of tools are available to accomplish this difficult task. Those tools are continuing to evolve and improve with the appropriate emphasis and resourcing. Our primary software tool is the CALL Collection and Observation Management System (CALLCOMS). This tool assists the CAAT in formulating collection plans and categorizing observations. It has a robust search, sort, and filtering capability. The long-range goal for automation is to have information on demand to an authorized user from a personal computer. The ISD section provides the CALL E-Mail and World Wide Web (www) addresses along with a graphic showing the different electronic tools available to the U.S. Army.

The **Research Division (RD)** uses the talents of archivists, historians, records managers, librarians, and security specialists to make contingency operations, major training exercises, combat training center rotations, experimental force events, and other selected records available to the Total Army. This documentation effort, assisted by the Defense Automated Printing and the Fort Leavenworth Directorate of Information Management, employs state-of-the-art scanning and digital conversion technology to upload unclassified and classified information on the CALL Data Base (CALLDB).

A key point to remember is that although CALL stands as a focal point for lesson collection, analysis and dissemination, the entire U.S. Army is the major collector, disseminator, and user of what we learn collectively. It is through the sharing of tactics, techniques and procedures (TTP) and information that knowledge truly transforms itself into combat-ready and capable soldiers and units.

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LESSONS LEARNED DIVISION

INTRODUCTION

The Lessons Learned Division is composed of two branches: Actual Operations and Combat Training Center.

MISSION

The mission of the Lessons Learned Division is to process and analyze observations and information from a variety of sources, and to produce literature in a variety of media which contain lessons learned and TTP.

ARMY INPUT TO CALL

To be effective, the lessons learned process must be comprehensive. Therefore, units and individuals play a tremendous role in providing a knowledge base for the whole of the Army. CALL continually solicits and receives observations, lessons, articles, and information from the Total Force which enables others to learn and refine unit training. If the observations and lessons that you learn from CALL publications and electronic media assist you in accomplishing the mission, then the lessons learned process is working effectively. Individuals and units that have lessons and information that can assist other units to do the job correctly the first time should forward their input to CALL. CALL will acknowledge receipt and work with the author(s) to refine the content into a publishable form. CALL can edit, format, and provide the layout.

It is everyone's responsibility to minimize losses and accomplish the mission to standard the first time. There are numerous means to contact CALL. They are identified and explained within this handbook.

ANALYSIS

CALL receives input from a variety of sources and in many different forms. For large or complicated observation collection, CALL organizes a Combined Arms Assessment Team (CAAT). When a CAAT is used, the analysis process usually begins with a subjective analysis accomplished while in theater by CAAT members and the CAAT team chief. Simultaneously, a CALL analyst at the Center reviews observations and raw data received from the CAAT for content, rewriting if necessary, and refining the input. The analyst also provides comments and recommendations back to the collection team for clarification and validation. This exchange of information reduces the amount of time necessary to provide feedback to deploying units and the U.S. Army.

OTHER ANALYTICAL REQUIREMENTS AND PRODUCTS

Input to the Lessons Learned Division can consist of information in differing formats and perspectives. As the CAAT-Analyst relationship describes, preliminary screening or analysis is conducted by the analyst to determine the relevance of observations collected by a CAAT. However, input to the Lessons Learned Division can include articles devoted to lessons and general information that may have importance to the U.S. Army such as tactics, techniques and procedures. If the collected data is considered relevant and valuable to the U.S. Army, it can be manipulated, edited, and formatted as necessary and placed in various CALL products for dissemination. Input to the Lessons Learned Division can be both active and passive and subjective and objective. To provide the field with timely information, lessons, and tactics, techniques and procedures, CALL publishes a wide variety of products. The following provides a short explanation of several CALL products.

Newsletters: A Newsletter is a publication that addresses a specific subject (i.e., Humanitarian Assistance, Civil Disturbance).

CTC Bulletins, CTC Observations and Trends Products: These products are periodic publications that provide current lessons/TTP and information from the training centers (see Combat Training Center (CTC) Branch Section).

Special Editions: Special Editions are newsletters related to a specific operation or exercise. Special Editions are normally available prior to a deployment and targeted for only those units deploying to a particular theater or preparing to deploy to the theater.

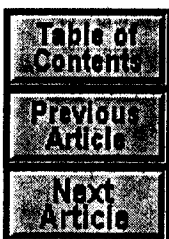
News From The Front! Bulletin: This bulletin is a bi-monthly product that contains information and lessons on exercises, real-world events, and subjects that inform and educate soldiers and leaders. It provides an opportunity for units and soldiers to learn from each other by sharing information and lessons with the Total Force.

Training Quarterly: Accessed from the CALL Homepage. The Army's first on-line publication. It is focused at TTP for brigade and below.

Handbooks: Handbooks are "how to" manuals on specific subjects (i.e., rehearsals, inactivation).

Initial Impressions Products: A product developed during and immediately after a real-world operation (Bosnia, Vols: I, II, III/IV) and disseminated in the shortest time possible for follow-on units for use in educating personnel and to support training prior to deployment to a theater. Training products (i.e., vignettes) may also be produced to support the follow-on unit to focus training activities.

It is the analyst's responsibility to develop all collected data into a form that is meaningful, provides discussion, supports an exchange of ideas, and enables a reader to enhance performance or facilitate individual and unit training and operations. CALL serves as a conduit between sources of information and the users of that information.



[Introduction to CALL](#)

[Lessons Learned Division: Actual Operations Branch](#)

LESSONS LEARNED DIVISION

ACTUAL OPERATIONS BRANCH

INTRODUCTION

This section presents an overview of the division most field units interact with during field training exercises (FTXs), command post exercises (CPXs), and contingency operations. Personnel from the Actual Operations Branch are trained collectors of information and observations. The Actual Operations Branch is the action agency for CALL.

MISSION

On order, CALL deploys worldwide to collect lessons learned and TTP from both contingency operations and training exercises. As necessary, CALL organizes, trains, deploys, and supports Combined Arms Assessment Teams (CAATs) to gather information for the total Army.

COLLECTION

The Actual Operations Branch consists of trained officers and senior NCOs prepared to serve as observers or as CAAT operations personnel. CALL maintains a Contingency Collection Plan. This plan is the baseline document for all contingency collections. The Actual Operations Branch receives and plans collection operations, develops collection plans, coordinates collection operations, and writes draft initial impressions reports based on collected information. It can assist units and agencies in developing collection plans to support internal unit collection efforts or to gather specific information required by a unit commander.

Collection personnel deploy with sufficient automation equipment and supplies to allow them to electronically pass observations and data back to CALL using digital communications. This same technology can provide the host unit with an avenue to access previous lessons learned, CALL publications, and exportable training support packages on a variety of subjects and sources.

PROCESS

The collection process usually consists of four major phases.

Phase I: Mission Analysis and Planning

Once requests or taskings to gather information and observations are received, mission analysis and planning begins and the development of the collection plan is initiated. Collection Plans are focused, integrated documents that identify the requirements that CALL, with subject matter expert (SME) support, intends to complete during a collection event. A collection plan is an event-based document that focuses the CAAT on specific collection requirements (i.e., questions/tasks) developed for a specific issue(s). The plan is the heart of the collection effort and its development is the key activity in planning a collection mission. The collection plan focuses the collection effort, and the effort shapes the products that are produced at the end of the mission.

Collection Plan Functions:

- Provides direct and specific guidance to the observer
- Delineates collection responsibilities among the CAAT members
- Identifies the documents/references to be used in conjunction with the questions/tasks developed for assessment
- Determines the collection methodology for each question/task to be completed by the observer

The Collection Plan is the observer's contract to the CAAT Team Chief.

Collection Plan Composition (See Figure 1):

A collection plan is a hierarchical document comprised of the following categories:

- **Issue** - "Issues span multiple events . . . a collection plan is event driven." A collection plan is initially comprised of "prior developed issues" that have been chosen for assessment based on the scope and scenario of the specific operation or exercise.
- **Subissue(s)** - "A subissue is synonymous with a function from the Blueprint of the Battlefield (TRADOC Pamphlet 11-9)." Subissues provide the collection focus because they are function oriented.
- **Question(s)** - "A question equates to an observation requirement." The question is the "point of execution" for the observer. It requires action in the form of observation entry.

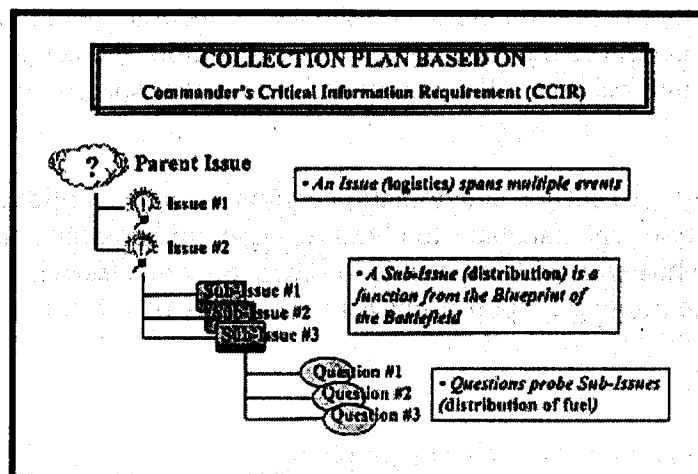


Figure 1

The Combined Arms Assessment Team (CAAT):

CAATs are task-organized teams of SME observers normally from TRADOC Schools and Centers. A team chief, external to CALL, is designated and, after training by CALL personnel, becomes responsible for the collection plan and CAAT collection activities. The CAAT is normally supported by a DA Combat Camera Crew. These teams are organized, trained, and deployed by CALL and the team chief in support of specific collection missions.

If a CAAT is being deployed and sufficient time is available, CALL will host a Collection Workshop for CAAT personnel. The workshop is normally conducted at CALL Headquarters on Fort Leavenworth and

lasts from three to five days.

This workshop is designed to refine the collection plan and train the tasked SMEs on the collection mission, the Lessons Learned process, and the CALL methodology. Ideally, the planning timeline for all collection efforts would include at least one workshop to ensure that deployed SMEs are fully trained and able to collect relevant information and observations. (See Figure 2.)

CAATs are formed to retrieve specific information relating to training exercises, operations, or conflicts. The selection and organization of a CAAT is mission dependent. Teams consist of:

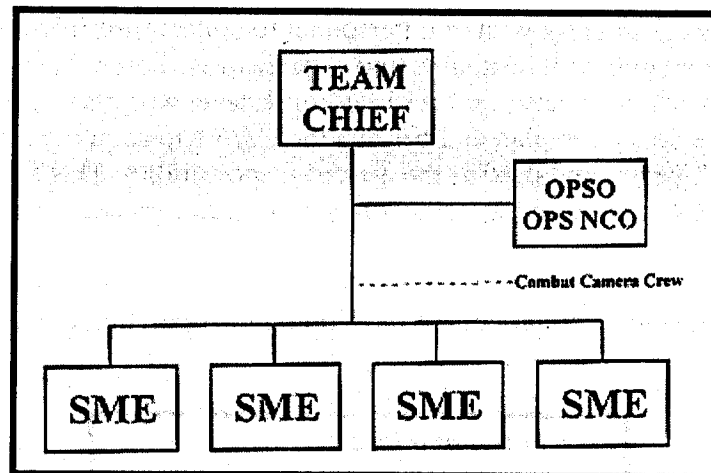


Figure 2

The process described above is the preferred method for organizing, training, and deploying a deliberate CAAT. In cases involving rapidly executed contingency operations, CALL deploys organic collection personnel to link up with the deploying unit as quickly as possible. CALL is prepared to deploy OPSOs within 24 hours of notification. If needed, a follow-on CAAT would then be organized as quickly as possible and deployed. In this case, the contingency collection plan guides collection operations and abbreviated CAAT training is conducted enroute or in the contingency area.

Phase II: Deployment and Unit Linkup

This phase begins with the deployment of observer/collectors to the collection site or to the aerial or seaport of embarkation (A/SPOE) and linkup of those personnel with the host unit. The phase terminates when the unit and collection team are combined and deployed.

CAATs deploy to unit A/SPOEs or exercise sites based on timelines developed during Phase I. CALL Collection Division operations officers (OPSOs) arrange counterpart linkup between SMEs and unit personnel. This linkup may be at the staff section, unit, or individual level based on the mission. CALL personnel normally begin collection activities immediately on arrival. This is done to support the collection effort and to assimilate the CAAT into the host unit quickly as it completes its deployment process. CALL observer/collectors normally have the following minimal support needs:

- Access to staff/command updates, planning sessions, and briefings
- A work space with access to communication links that support E-Mail
- Mess, transportation, and billeting support

For contingency operations, CALL personnel are attached to the host unit and become an integral part of the operation. CALL observers are not evaluators. Their mission is to support and assist the unit being observed as well as to collect observations for the total Army.

Phase III: Collection Operations

This phase begins once SMEs link up with counterparts and terminates when the CAAT redeployes or is replaced with a follow-on team. The collection plan, collection focus, end state, intent, along with unit missions, proponent school issues, and operational considerations drive the collection effort.

During this phase, SMEs work directly with unit personnel to collect information and observations. Collected observations are staffed with host units and organizations before being transferred to CALL for analysis. Two-way communications between CALL at Fort Leavenworth and the CAAT in theater allows for continual updates to the collection plan and permits the CAAT to acquire answers to requests for information generated both within and outside the area of responsibility. This two-way communication supports a continual analysis of collected information and observations while providing for immediate feedback to the host unit.

During this phase, the team begins the process of developing the operation or exercise "end state" product(s).

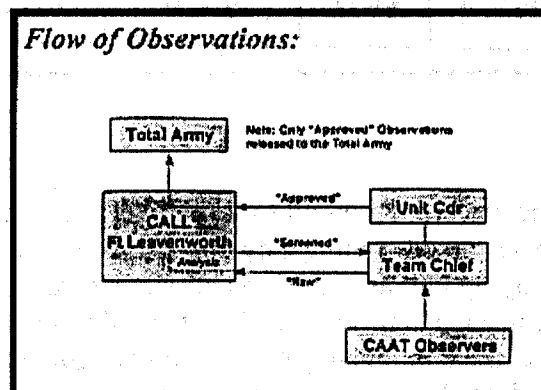


Figure 3

In some contingency operations, the CALL OPSO or CAAT Team Chief is assigned the additional duty of TRADOC liaison officer. CALL personnel then provide a single focus for TRADOC support to contingency theaters.

THE CAAT-ANALYST RELATIONSHIP

The following steps outline the analytical process in terms of the CAAT and analyst operational relationship.

- A CAAT is formed for a focused collection effort and a CALL Analyst is assigned to support the CAAT. The analyst is an integral part of the collection plan development and CAAT planning activities.
- The CAAT deploys, and a communication link is established between, the CAAT, CALL, and the analyst.

- While in theater, the CAAT Team Chief and CALL OPSO collect observations from the team members on a recurring basis. The team chief and CALL OPSO conduct an initial review of the subjective observations. The initial review includes:
 - Screening for content
 - Editing grammar of initial observations
 - Ensuring that the observations address collection plan requirements
 - Ensuring that the discussion supports the observation statement and that doctrine, training, leader development, organization, materiel, and soldier support (DTLOMS) implications are included with the collected data.
 - Identifying problems that are potential warstoppers.
- Observations are forwarded electronically by the CALL OPSO to the CALL Analyst and entered into a working database. Observations are categorized under TRADOC Pamphlet 11-9, Blueprint of the Battlefield, and the Battlefield Operating Systems (BOSs). The analyst works observations on a daily basis, providing questions back to the team as necessary to resolve conflicts and refine the collection effort. Any supporting documents that accompany the observations are copied and filed for eventual placement into the CALLDB either electronically or by scanning. The CALLDB contains recent contingency operation documents. It is discussed in the Research Division section.
- Upon completion of the initial screening by the analyst, the observations can be released to specific units or commands rotating into the theater to immediately support their training initiatives. The release authority is granted by the CALL Director working in conjunction with deployed and follow-on units and commands and the chain of command. Anonymity and content objectivity (free of subjective judgmental errors in knowledge and expertise) are extremely important during this stage of the process.
- Observations are compared to past information in the CALL database or other documents to establish frequency.
- The CAAT provides a compilation of observations and briefs the supported Commander prior to departing theater. Once the CAAT returns, all observations are categorized and compiled into an initial impressions product. This product is produced through the efforts of the CAAT and CALL analysts to define and bring to closure all observations to be presented to the field.
- Those observations that are determined to be relevant and supported objectively are identified and grouped under a particular BOS and are provided as input to the initial impressions product.
- Prior to the CAAT departing CALL, a draft of the initial impressions product is completed. The draft is staffed to all interested commands and agencies for comment.
- Appropriate comments from the staffing process are incorporated into a final product. The final product is then disseminated to numerous Army Commands as a training tool for future contingencies. Simultaneously, the product is placed in the CALLDB.

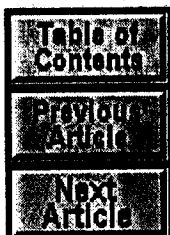
- At this point, the Director, CALL, in coordination with the Lessons Learned Division, determines whether other CALL products should be developed to further disseminate the information.

The automation assets in CALL have a word search capability that can search several web sites. CALL is striving to have in place the capability to search, analyze, and summarize from multiple unclassified and nonsensitive data bases. In addition, CALL is working to have the capability to search, analyze and summarize multiple classified and sensitive data bases. CALL also plans to have the capability to produce the summarized information on CD ROMs for units that are deploying or participating in major training events, plus a satellite uplink/downlink capability to enter the Gateway in case normal communications means are not available to deployed units.

Phase IV: Redeployment Report Development

This phase begins as soon as the team arrives in theater. The constant exchange and analysis of observations between CALL and the CAAT allow for a draft product before redeployment. Phase IV is completed when the team redeploy and terminates when a coordinating draft initial impressions report or similar product is completed. During this phase, all collected information, data, observations, and SME notes are reviewed and analyzed. A product representing the results of the collection effort is developed, staffed, and published, and all documents are prepared for archiving (electronic). Normally units can expect to receive an initial CALL product for staffing within two to three weeks.

Once CALL observers redeploy and products are developed, the Lessons Learned Division assumes the lead. The Lessons Learned Division along with the assigned collection OPSO(s) finalize the collection product. CALL collection products include, but are not limited to: initial impressions and reports, newsletters, articles, training vignettes, handbooks, and CALL's exportable training packages.



[Lessons Learned Division \(Overview\)](#)

[Lessons Learned Division: Combat Training Center Branch](#)

LESSONS LEARNED DIVISION

COMBAT TRAINING CENTER BRANCH

INTRODUCTION

Virtually every day of the year, corps- to squad-level Army units fight fierce battles against a well-trained and equipped enemy in terrain varying from barren desert to densely vegetated woodlands. This simulated combat challenges every type of maneuver and support unit the U.S. Army can muster. The missions run the gamut from conventional warfare to contingency operations. This daily warfare occurs at the Combat Training Centers (CTCs). The CTCs provide the richest, continuous source of observations and lessons available to the U.S. Army, as units routinely measure their skills in a realistic, unforgiving environment.

MISSION

To capture lessons learned and TTP derived from the CTCs for dissemination to the Total Army, as part of the overall lessons learned process.

PRODUCTS

The CTC Quarterly Bulletin and the CTC Trends are the major sources of CTC-derived lessons that CALL disseminates. The CTC Branch is also responsible for the execution of the CTC Focused Rotation Program, where the TRADOC schools, centers and Battle Labs can use the respective CTCs to help identify, develop, and solve warfighting issues. The CTC Branch also provides training support packages tailored to specific unit requirements, and distributes the packages to units approximately six months before their scheduled rotation. Additionally, the CTC Branch publishes topic newsletters and CTC Orders to assist in training brigade and battalion staffs.

CTC Quarterly Bulletin: This publication showcases articles that focus on techniques and procedures that work! The articles encompass all aspects of warfighting, including the preparation for combat as well as for the execution of combat missions. The authors are most often current or former CTC Observer/Controllers (O/C), but certainly not limited to that group. The primary audience is leaders and soldiers of units scheduled for a CTC rotation. However, successful techniques and procedures related to the planning, preparation, and execution of tactical-level warfare is the business of the Total Army. The CTC Branch routinely solicits articles for the bulletin that deal not only with combat, but also with combat support and combat service support.

CTC Trends:

- 1. CTC Trends Bulletin.** CALL receives trends and associated TTPs from the training centers on a routine schedule. The trends and TTPs are identified by observers/controllers (O/Cs) during unit rotations at the CTCs. The CTC Branch of CALL organizes the trends in accordance with TRADOC Pamphlet 11-9, Blueprint of the Battlefield, and publishes a trends bulletin every six months for each CTC.
- 2. CTC Priority Trends Compendium.** CALL compiles the recurring trends and associated TTPs for each CTC into a compendium of priority trends, published annually. The compendium also contains a matrix chart which shows the number of times per quarter that a particular trend/observation was documented over the previous two or more years.

3. CTC Trends Analysis. CALL's Trends Analysis is a two-part product. First, for each CTC, CALL publishes a separate analytical review of each of the repeated (priority) trends, both positive and negative, that were included in their respective CTC Priority Trends Compendiums. This analysis highlights doctrine, training, leader development, organization, materiel, and soldier (DTLOMS) implications. They are published periodically with limited distribution as requirements dictate. Second, CALL conducts a cross-BOS, cross-CTC analysis of all CTC trends. This analysis discusses DTLOMS implications across all CTCs and provides direct input into the TRADOC Remedial Action Program (T-RAP), TRADOC Regulation 11-13.

Topic Newsletters: This publication highlights a specific subject or issue. For example, CALL Newsletter No. 95-7, May 95, Tactical Operations Center (TOC), identifies problem areas and provides useful techniques and procedures.

CTC Orders: Upon request, CALL provides sample CTC orders to units to facilitate training the staff planning process. The orders are provided by the CTC Operations Group and prepared for dissemination by CALL.

TRADOC Remedial Action Program (T-RAP): T-RAP is a systematic process for prioritizing and then resolving issues affecting Army warfighting capabilities. CALL's T-RAP responsibilities, as defined in TRADOC Reg 11-13, are to collect warfighting issues via all-source collection, review, identify sufficiency, and submit potential issues for entry into the T-RAP process. CALL also collects observations on post issue-resolution performance to help determine the effect of implemented solutions.

PROGRAMS

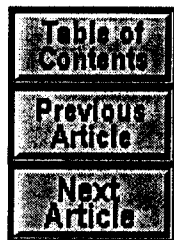
HEADS UP: This program evolved from the belief that CALL's greatest potential for positively impacting unit performance rests with impacting Home-Station Training. HEADS UP is a training support package (TSP) containing the most recent trend and lessons information, relevant CALL newsletters and CTC-produced "how to" tapes. This information is designed to help units assess themselves in light of identified CTC shortcomings, while providing some solutions to those shortcomings. If received and incorporated early in unit training, the lessons inherent in HEADS UP should help units avoid repeating the mistakes made by others. If this is accomplished, then the ultimate objective of a lessons learned system is accomplished.

Focused Rotation: CALL serves as TRADOC's executive agent for this program designed to allow TRADOC schools, centers, and Battle Labs to use the CTCs as a major source for both issue identification and solution. Specifically, the program allows subject matter expert (SME) collectors, coordinated through the CTC Operations Group by CALL, to augment the normal O/C staff. These SMEs focus their efforts on a specific issue. Ideally, the initial collection effort is used as part of an active collection diagnostic to corroborate data already derived from the CTC archives. The initial issue collection should concentrate on further defining the scope of the issue, and also begin to look for potential issue solutions. The results of the initial collection should form a significant basis for the development of solutions for an issue, based on some combination of doctrine, training, leader development, organization, materiel, and soldier support (DTLOMS). As the DTLOMS solutions are implemented, typically a second focused rotation would be used to determine if the implemented solutions work. The CTC Branch, in conjunction with the respective CALL Observation Divisions at the CTCs, conducts the coordination and liaison necessary between the TRADOC proponent and the Operations Group to make the rotation occur.

Requests for Information and Unit Assistance: CALL provides unit assistance through several means:

telephone, E-mail, the World Wide Web, list servers and assistance to deploying units.

Archives: Through CALL, all of the CTC rotation Take-Home Packets (THPs) are maintained in a CTC relational data base.



Lessons Learned Division: Actual Operations Branch

Information Systems Division

INFORMATION SYSTEMS DIVISION

INTRODUCTION

To achieve maximum value from the Army's lessons learned program, every soldier or unit must be able to easily access the lessons and information gained from CALL's finely-tuned collection, analysis, and publication process. Perhaps, even more important, that same soldier or unit should be provided the opportunity to participate in the process. Effective use of emerging telecommunications and computer communication technologies is the key to providing access to the lessons learned process. As these technologies continue to mature, CALL will capitalize on the efficiency that they add to disseminating information and communicating with units in the field.

MISSION

To provide automation equipment infrastructure support to CALL and to facilitate data collection and processing and to speed dissemination of lessons to the Total Army through the Gateway from various data bases and the Web.

SUPPORT TO COLLECTION AND ANALYSIS

The primary tool to aid the collection and analysis process is the CALL Collection and Observation Management System (CALLCOMS). This software application assists the Combined Arms Assessment Team (CAAT) in formulating collection plans and categorizing observations. The robust search, sort, and filtering capabilities assist the analyst and simplify trend identification. CALLCOMS can run on a stand-alone PC for individual users or observations can be transmitted using the file transfer protocol (FTP) back to the CALL Network to better support the massive amount of data collected by a CAAT. All analyzed and approved data produced using CALLCOMS is fed into the CALLCOMS database. Final reports are generated using these observations and a final product is produced and placed in the CALL data base for Web accessibility. The major emphasis of the continued development of CALLCOMS is to make it a tool by which units and individual soldiers/officers can participate in the CALL process. The free distribution of the CALLCOMS software application to units and schools provides the means to influence the process.

SUPPORT TO PUBLICATION AND DISSEMINATION

The automation process aids publication and dissemination of products by speeding production and distribution. Although products will continue to be produced in paper format for the foreseeable future, first priority for dissemination is through the Web. CALL supports the four main segments of electronic distribution: E-mail, Web, CALL data base, and the CALLCOMS data base.

CALL can be reached through the following methods:

E-mail: call@leav-emh1.army.mil
Web: <http://call.army.mil/call.html>
fax: (c) 913-684-9564/4387 (DSN) 552-9564/4387
voice: (c) 913-684-9550/9556 (DSN) 552-9550/9556

CALL on the Web

Using the URL listed above, customers can access the CALL Home Page and, if users so desire, access to the CALL data base can be accomplished by completing the CALL registration form on line. After completing the CALL registration form, customers can send it electronically to CALL via the submit button located on the registration form. The CALL Executive Officer and the Customer Assistance Branch then review the application, verify who the customer is, and either returns a password to approved users through the U.S. Postal Service or notifies applicants that their application was denied. The password allows approved users access to the CALL data base.

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RESEARCH DIVISION

Using the talents of archivists, archives technicians, historians, records managers, librarians, and security specialists, the CALL Research Division makes contingency operations, collective training, and other selected records available to the Total Army via the CALL Data base (CALLDB). In conjunction with partners in the Defense Automated Printing Service (DAPS), the Research Division employs state-of-the-art scanning and digital document and multimedia conversion technology to upload unclassified and classified documents onto the CALLDB.

Based on powerful document management and World Wide Web technology, the CALLDB makes Army lessons learned, tactics, techniques, and procedures (TTP) and research material from the post-Vietnam U.S. Army experience available to approved Army, DOD, and government users world-wide. The CALLDB currently contains some 2 million pages of documentation made available on both classified and unclassified systems. The unclassified CALLDB can be accessed by approved users through the CALL Gateway Home Page at URL <http://call.army.mil/call.html>. The classified CALL DB can be accessed via the Secure Internet Protocol Router Network (SIPRNet) at IP 199.123.114.194:1100. Access to both systems requires registration through CALL, which will issue a userid and password to those serving in or working for the U.S. Armed Forces that can demonstrate a valid reason for need-to-know information available on the CALLDB.

The Research Division supports the CALL mission to deliver the right knowledge sets in the right format at the right place at the right time to sustain, enhance and increase the Army's preparedness to conduct future operations. Using state-of-the-art supermini computers and Excalibur Technologies Electronic Filing System document management software as dissemination vehicles, the Research Division applies international archival standards and supplemental information obtained from originating agencies to structure records to make them easily accessible and user-friendly to CALLDB users. CALL librarians create the CALLDB thesaurus to permit even greater accessibility to users by providing a keyword reference tools for the CALLDB.

The Research Division processes records in three basic ways. Records received in paper format are processed by Research Division archives technicians for scanning at the DAPS. The resulting digitized documents are then uploaded onto CALLDB computers by Fort Leavenworth Directorate of Information Management personnel. Documents received electronically are uploaded by archives technicians according to arrangements devised by CALL military analysts and historians. Research Division personnel also perform in-house scanning to perform small uploading tasks and to respond rapidly to Army and DOD critical information requirements. After processing, CALL records managers retire hard-copy, digital, and multimedia records to approved repositories. CALL historian/archivists restructure and rename the electronic filerooms based on archival standards and the experience of CALLDB users in accessing information online.

The online archival collections of the Research Division operate in a "system high" security mode. Classified and unclassified documents are maintained on two separate computer systems, and users must demonstrate the necessary security clearance for access. Access to information is granted on a "need-to-know" basis, and information is topically segregated by fileroom to support the varying access needs of CALLDB users.

CALL is currently engaged in a partnership with different agencies to integrate best-of-class systems and technologies from across the federal government that will enhance CALL's capability to provide relevant multimedia lessons learned, TTP, and research materials to the Army and DOD. The Federal Information

Technology Test Bed will establish an electronic multimedia archives, records management, and security model for the federal government, using CALL Research Division methodologies and procedures to structure, classify, upload, and conduct life-cycle management for a vast spectrum of Army and DOD electronic information formats.

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CALL Homepage

WARNING!!

You are entering an Official United States Government System, which may be used only for authorized purposes. Unauthorized modification of any information stored on this system may result in criminal prosecution. The Government may monitor and audit the usage of this system, and all persons are hereby notified that use of this system constitutes consent to such monitoring and auditing.



1997-1998
Department of Defense

1997-1998
Department of Defense

Center for Army Lessons Learned



INTRODUCTION TO THE CALL GATEWAY

The Gateway for the Center for Army Lessons Learned Provides Operational and Training Lessons Learned, Tactics, Techniques, and Procedures (TTP) and Research Material!

World Wide Web Address: <http://call.army.mil/call.html>

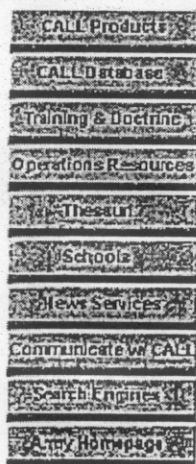
Central to CALL's mission to disseminate lessons and relevant Tactics, Techniques and Procedures (TTP) is the CALL GATEWAY. This Gateway is the electronic entrance to a virtual information center designed for and by military users. The ambitious goal is to be a "one-stop shop" center where military users can quickly find the information they need to improve training, prepare for a contingency operation, or gather research information.

Currently the Gateway appears as a normal "Homepage" on the Internet (<http://call.army.mil/call.html>). This allows easy access to a wide range of users, from official accounts in TRADOC Schools to Platoon Sergeants using AOL at home. Future improvements will make the Gateway significantly more than a normal Homepage, but CALL is committed to maintaining the familiar, user-friendly Internet interface.

The foundations of the Gateway are the CALL products available on line and the Internet search capability. CALL has several hundred of its own newsletters and other lessons learned products available on line. These include the popular News From the Front!, CTC Quarterly Bulletin, and CTC Trends, as well as the single subject newsletters such as the very useful Military Decision Making. Users can quickly search these documents, or expand their search to include many other military web sites that include good TTP or doctrinal products. The search engine is both powerful, with several advanced options, and fast.

CALL Homepage

Center for Army Lessons Learned



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1996 Vice President Gore
Hammer Award Winner



1996 Camputerworld
Smithsonian Award Winner

CALL Products	CALL publications provide lessons, Tactics, Techniques and Procedures (TTP), and information for the U.S. Army Soldier. The products are based on collection efforts directed at the Combined Arms Training Centers (CTCs), units, real-world operations, and Army exercises. Examples of the products include: Newsletters, CTC Bulletins and Trends, Handbooks and News From the Front!, a bi-monthly multiple subject bulletin. For a description of each CALL product, refer to Lessons Learned Division section, Other Analytical Requirements and Products.
CALL Database (Restricted Access)	This database is For Official Use Only (FOUO). The main CALLDB page provides a link to the CALLDB Access Request Form. Access can then be requested on line by completing an application. It can be used by approved users (DOD Government Employees and U.S. Military Personnel). The database contains a number of filerooms; examples include: CALL fileroom, Combined Arms and Fort Leavenworth Archives, Operation DESERT SHIELD-DESERT STORM-Gulf War, Operation JUST CAUSE-Panama, Operation UPHOLD DEMOCRACY-Haiti, CTCs, and Vietnam War Interview Archive.
Training & Doctrine	This subarea under the CALL Website contains products associated with training and doctrine. Some examples include: the CALL Training Quarterly Bulletin, an on-line publication for the exchange of TTP for units and unit trainers; and publications on Joint Doctrine.
Operations Resources	To assist the commander in accomplishing the mission, provide for focused soldier training, and support the military researcher, CALL provides several links to differing agencies. Some examples include: the United Nations, State Department, Other Services, Military History, Logistics, and Humanitarian Relief Links.
Thesauri	Included in this area is CALL's Thesaurus, the Army Training Digital Library (ATDL) Acronym Search, the DoD Dictionary of Military Terms, and Jane's Defence Glossary.
Schools	To add to the knowledge base and provide a perspective on other service current and past operations, this subarea in the Website provides links to several other service schools. Examples are: National, Joint Service, Navy, Marine Corps, Coast Guard, and Air Force Schools.
News Services	The U.S. and International News subarea includes links to CNN, Fox, MSNBC News, and other news agencies.
Communicate w/CALL	To provide the soldier with a mechanism to communicate directly with CALL, this subarea provides the ability to comment on the CALL Website, request for information, and input lessons learned. Additionally, this page provides a brief history of CALL.
Search Engines	To facilitate searches and limit the time involved with a search for particular information and lessons, CALL provides several search mechanisms. They include such search drivers as the CALL Search (limited to the CALL Website) and the CALL Catalog Server which searches multiple commands, research facilities, and schools.
Army Homepage	This Homepage is linked to the CALL site to provide current information that impacts on Army life along with new initiatives and monthly major U.S. Army activities.

ACKNOWLEDGEMENTS

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Introduction to the CALL Gateway

Army Homepage	This Homepage is linked to the CALL site to provide current information that impacts on Army life along with new initiatives and monthly major U.S. Army activities.
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News Services	The U.S. and International News subarea includes links to CNN, Fox, MSNBC, News, and other news agencies.
Schools	To add to the knowledge base and provide a perspective on other service current and past operations, this subarea in the Website provides links to several other service schools. Examples are: National, Joint Service, Navy, Marine Corps, Coast Guard, and Air Force Schools.
Treasury	Included in this area is CALL's Treasury, the Army Training Digital Library (ATDL), Acronym Search, the DoD Dictionary of Military Terms, and Jane's Defence Glossary.
Operations Resources	To assist the commander in accomplishing the mission, provide for soldier training, and support the military researcher, CALL provides links to differing agencies. Some examples include: the United Nations, Department, Other Services, Military, and Relief Links.
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CALL Products	Collection efforts directed at the Combined Arms Training Centers (CTCs) (TTP), and information for the U.S. Army Soldier. The products are based on units, real-world operations, and Army exercises. Products include: Newsletters, CTC Bulletins and Trends, Handbooks and News Front, a bi-monthly product, refer to Lessons Learned and Products.

Appendix F

ONLINE LESSON'S LEARNED OBSERVATION FORMED

Lessons-Learned Observation form used by the *U.S. Army's Center for Army Lessons-Learned* website:

Available at:
<http://call.mil.gov/call/forms/obser.htm>

Observation Form

Note: In completing this form, submission of name, e-mail address, and organization is voluntary.

Administrative Information:

1A) Against what unit or exercise/operation was the observation made?

1B) Which service did the unit belong to?

- ☐ Army
- ☐ Navy
- ☐ Air Force
- ☐ Marines

1C) What component did the unit belong to?

- ☐ Active
- ☐ Reserve
- ☐ National Guard

[Help](#)

Observed Indicators:

Applicable to: (Highlight One)

- Don't Know
- Doctrine
- Training
- Leadership Development
- Organization
- Materiel

Principal Category: (Highlight One)

- Don't Know
- Maneuver
- Fire Support
- Air Defense
- Command and Control
- Intelligence
- Mobility and Survivability
- Combat Service Support

[Help](#)

Interoperability Indicators:

Instructions: Check One Major Interoperability Category (Army Only, Joint, Combined, Joint & Combined), then highlight all appropriate options within the category.

<input type="checkbox"/> Army Only <input type="checkbox"/> Joint & Combined	Mechanized <input type="checkbox"/> Armor Airborne Mountain Light Infantry Special Ops Ranger Light/Heavy Heavy/Light <input type="checkbox"/>	<input type="checkbox"/> Army <input type="checkbox"/> Navy <input type="checkbox"/> Air Force <input type="checkbox"/> Marines <input type="checkbox"/> Coast Guard	<input type="checkbox"/> Combined France <input type="checkbox"/> Australia <input type="checkbox"/> Russia Korea NATO U.N. Other <input type="checkbox"/>
	U.S. Army <input type="checkbox"/> U.S. Navy U.S. Air Force U.S. Marines U.S. Coast Guard France Australia Russia Korea NATO U.N. Other <input type="checkbox"/>		

[Help](#)

Environment Indicators:

(Check the one most applicable)

- ☐ Not Applicable
 ☐ Arid/Desert
 ☐ Woodland Temperate
 ☐ Urban
 ☐ Artic/Cold Weather
☐ Tropic/Jungle
 ☐ Mountain

[Help](#)

1E) Unit phone number? DSN: -- Comm: () --

1F) Your observation title:

[Help](#)

Observation Narrative:

[Help](#)

[Example Observation Narrative](#)

1G) What was your observation?

☐

☐ [Help](#)

[Example Observation](#)

1H) Your discussion:



Your observation will be sent to the Center for Army Lessons Learned

Submit Observation Form

at Ft. Leavenworth, KS.

Clear the Observation Form

This document was prepared by CPT Gary Domke, CALL, Ft Leavenworth, KS.
Last Update: 8 September 1997 (ses)

Your comments are welcome ... send to
call@leav-army.mil



Help



Example Discussion

1I)The Lessons you think should be Learned:



Help



Example Lessons Learned

1J)What you think the recommended action should be:(DTLOMS Implications)



Help



Example DTLOMS Implications

Your Name

Your Email Address

Your Organization

Your observation will be sent to the Center for Army Lessons Learned at Ft. Leavenworth, KS.

This document was prepared by CPT Gary Domke, CALL, Ft Leavenworth, KS.

Last Update: 8 September 1997 (ses)

Your comments are welcome ... send to
call@leav-emh1.army.mil

Appendix G

LESSONS-LEARNED OBSERVATIONS

Lessons-Learned observations and excerpts from:
After-Action Report for Humanitarian Demining Training Program (Namibia)

AAR NAMIBIA DEMINING (cont.)

Recommendation: Purchase the Motorola HF/VHF communications system in the U.S. prior to deployment. Additional maintenance contracts could be established with the Motorola dealership in Namibia or South Africa.

Problem: EOD personnel should be attached to SF demining teams during future humanitarian demining missions.

Discussion: EOD personnel proved to be an outstanding asset for UXO destruction training and rendering ordnance safe for training. The NDF had numerous Soviet Block Mines (unfuzed) which were considered safe for training by the EOD personnel. These mines were used for identification classes and destroyed during charge placement classes.

Recommendation: Continue to attach 1-2 EOD personnel to SF demining teams for UXO destruction techniques and rendering non-standard ordnance safe for training.

Problem: Funding for mine rollers and heavy equipment was not available during the initial planning and training concept.

Discussion: Based on the antipersonnel mine field threat in Namibia, heavy equipment and mine rollers proved to be a very efficient and effective demining technique in conjunction with manual detector operations.

Recommendations: Design and purchase a more efficient mine roller for next year's program.

Problem: NDF section and platoon leaders need additional training in troop leading procedures and organizing for demining operations.

Discussion: NDF section and platoon leaders experienced difficulty when planning and organizing for the demining mission. This was evident during the FTX when the leadership required additional training and guidance when organizing a demining site.

Recommendation: Demining POI should include at least one week of demining troop leading procedures for platoon and section leaders.

Problem: There was no DAO representative at the U.S. Embassy in Windhoek.

Discussion: In the absence of a DAO it was necessary to provide a senior NCO at the Embassy (Windhoek) to function as a LNO and program coordinator. This individual was essential to the operation and was responsible for supervising contracting agreements and administrative matters to include MIPRS, country/flight clearances, and logistical coordination with the NDF.

AAR NAMIBIA DEMINING (cont.)

Recommendation: Maintain a LNO at the U.S. Embassy in Windhoek to support future JCETS and demining operations.

Problem: The concept for integrating a National Demining Command Center in Windhoek was not feasible.

Discussion: The MOD preferred to maintain command and control of the demining unit with Army HQ's in Grootfontein. Additionally, the integration of the Namibian Police Ordnance Disposal Unit and the NDF ENG COY was not possible due to a conflict of interest and various personality conflicts between the two elements.

Recommendation: For future Namibian demining operations, work within the established force structure and task organization in order to simplify the program.

6. Additional lessons-learned during the JCET are enclosed in the JULLS format, Encls 1a-1f.
7. Post-Mission Budget Summary is enclosed in Encl 2.
8. Additional resources summary:

- a. Ammunition: The following demolitions were purchased from South Africa thru the AMEMBASSY and provided to the NDF for demining operations:

- 1) 22 CTNS of Powercord (DETCORD)
- 2) 18 CTNS of Conepak
- 3) 74 CTNS of ENERGEX
- 4) 900 Detonators
- 5) 26 CTNS of Non-electric Firing Systems
- 6) 48 Cases of PE-4
- 7) 9 Cases of TNT

- b. Supplies: The following demining equipment was provided to the NDF and NAMPOL for demining operations.

- 1) 6 Blasting Machines
- 2) 40 AN/PSS-12 Mine Detectors
- 3) 9 NAVSTAR TRIMBLE (GPS)
- 4) 191 Fragmentation Vests
- 5) 145 Kevlar Helmets
- 6) 2 Computer Work Stations with Laser Printers
- 7) 6 Engineer Demining Kits (Complete)
- 8) Class VIII Expendable Supplies and M-5 Aid Bags (Sufficient supplies to sustain ENG COY for one year)

Enclosure 1A

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 June 1995

MEMORANDUM FOR Commander, Co. C, 3d Bn, 3d SFG(A) Fort Bragg, North
Carolina 28307

Subject: After Action Report

1. (U) JULLS Number: 393-001
Submitted by: SSG HAYTH –AOSO-SFT-TB-C-393
2. (U) Namibia Demining Mission, conducted on: 12-16 June 1995
3. (U) KEYWORDS: None.
4. (U) TITLE: Instructor Training Course (ITC)
5. (U) OBSERVATION: Some of the NDF soldiers had difficulty understanding the English language.
6. (U) DISCUSSION: The students attending ITC instruction were supposedly selsected because of their ability to comprehend English. This was not the case as some students had difficulty understanding English and one student was simply incapable.
7. (U) LESSON LEARNED: None.
8. (U) RECOMMENDED ACTION: Conduct an interview and or written test prior to instruction. This may eliminate a few of the poorer English speakers.
9. POC is the undersigned.

MONTY W. HAYTH
SSG, USA
Weapons NCO

ENCLOSURE 1B

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 Sep 1995

MEMORANDUM FOR Commander, Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 396 -LNO-001
Submitted by: SFC WEEKS-AOSO-SFT-TB-C-396
2. (U) Namibia Demining Mission, conducted on 17 May-29 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: Demining Liaison NCOIC
5. (U) OBSERVATION: Communications equipment ordered by the PDSS team was not readily available.
6. (U) DISCUSSION: Prior to my arrival in Namibia, I was under the impression that all the communications equipment had been ordered from a Namibian based company named Electrocom. Upon further investigation, upon arrival in Namibia, I was informed by the owner of the company that the equipment had been identified for purchase but that the owner needed an intent to purchase and a guarantee to purchase before the equipment would be ordered. I was also informed that if training of SOF personnel on the equipment was required, it would be an additional charge.
7. (U) LESSON LEARNED: None.
8. (U) RECOMMENDED ACTION: The personnel that are to perform the installation of the equipment accompany the PDSS team. This would allow the personnel performing the installation and training to identify if any additional training is needed and if they could receive the training at their home station.

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 Sep 1995

MEMORANDUM FOR Commander, Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 396 -LNO-002
Submitted by: SFC WEEKS-AOSO-SFT-TB-C-396
2. (U) Namibia Demining Mission, conducted on 17 May-29 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: Demining Liaison NCOIC
5. (U) OBSERVATION: Purchase of ADP equipment in country.
6. (U) DISCUSSION: ADP equipment purchased in country decreased the amount of time available to SOF personnel to training host nation personnel on the equipment. By purchasing the equipment in country, it was already configured for the 220 v/ac host nation commercial power.
7. (U) LESSON LEARNED: None.
8. (U) RECOMMENDED ACTION: Recommend the ADP equipment requirements be identified, if possible, by the PDSS team. If ADP equipment is to be purchased for the host nation; recommend that power requirements be identified; that all additional equipment modifications be identified; and that the ADP equipment be purchased prior to main body deployment.

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 Sep 1995

MEMORANDUM FOR Commander, Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 396 -LNO-003
Submitted by: SFC WEEKS-AOSO-SFT-TB-C-396
2. (U) Namibia Demining Mission, conducted on 17 May-29 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: Demining Liaison NCOIC
5. (U) OBSERVATION: Deployment of LNO without ADP equipment.
6. (U) DISCUSSION: Upon departure from FBNC, ADP equipment for the Demining Liaison NCO's use was unavailable. Upon arrival at the American Embassy, a computer and printer was made available to the LNO on a limited basis. In the initial phase of the Demining operations a computer and printer were not essential; however after the DAO's office closed and the demining instruction and training tempo began to increase, so did the need for a computer and printer. Upon arrival of the Demining team main body, a computer and printer were made available.
7. (U) LESSON LEARNED: If possible deploy with a Laptop.
8. (U) RECOMMENDED ACTION: Future Liaison personnel to Namibia need to deploy with a laptop computer, computer disks, and a printer if possible.

ENCLOSURE 1C

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 June 1995

MEMORANDUM FOR Commander, Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 393 -001
Submitted by: CPT LYONS-AOSO-SFT-TB-C-393
2. (U) Namibia Demining Mission, conducted on: 1 JUN-30 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: PDSS for Namibia Demining Mission
5. (U) OBSERVATION: The PDSS to Namibia did not contain appropriate communications personnel.
6. (U) DISCUSSION: The communications section of the PDSS consisted of the battalion signal officer and communications chief. They accomplished all necessary in-country coordination. However, upon their return to Ft. Bragg, information was not effectively passed to Charlie Company communications personnel. In-country expertise (I.E. face to face coordination) was also lost.
7. (U) LESSON LEARNED: Individuals responsible for coordinating and executing a specific mission should deploy on the PDSS.
8. (U) RECOMMENDED ACTION: The executing unit should send an individual on the PDSS. If expertise from higher headquarters is ordered prior to main body deployment. This would better facilitate the timeliness of the installation of and training on equipment.

DEPARTMENT OF THE ARMY
Company C (FWD), 3d Battalion, 3d Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307

AOSO-SFT-TB-C-393

22 June 1995

MEMORANDUM FOR Commander, Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 393 -002
Submitted by: CPT LYONS-AOSO-SFT-TB-C-393
2. (U) Namibia Demining Mission, conducted on: 1 JUN-30 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: PDSS for Namibia Demining Mission
5. (U) OBSERVATION: The Battalion surgeon was not needed on the PDSS.
6. (U) DISCUSSION: The medical coordination and requirements during the PDSS could have been accomplished by the Charlie Company B-Team medic. This would have given Charlie Company an individual with in-country knowledge and familiarity with Namibian medical personnel.
7. (U) LESSON LEARNED: Individuals responsible for coordinating and executing a specific mission should deploy on the PDSS.
8. (U) RECOMMENDED ACTION: The executing unit should send an individual on the PDSS.

ENCLOSURE 1D

DEPARTMENT OF THE ARMY
Company C (FWD), 3rd Battalion, 3rd Special Forces Group (Airborne)
Fort Bragg, North Carolina 28307-5233

AOSO-SFT-TB-C-390

22 NOV 1995

MEMORANDUM FOR Commander Co C, 3d Bn, 3d SFG(A) Fort Bragg,
North Carolina 28307

SUBJECT: After Action Report

1. (U) JULLS Number: 390 –COMMO-001
Submitted by: SSG BUTLER-AOSO-SFT-TB-C-390
2. (U) Namibia Demining Mission, conducted on: 1 JUN-25 SEP 95
3. (U) KEYWORDS: None.
4. (U) TITLE: Communications
5. (U) OBSERVATION: The ODB communications NCO did not receive call signs and frequencies for all the teams in the operational area until three weeks after being in country.
6. (U) DISCUSSION: In order for an ODB to run an AOB, it must have all the required information in which to establish and maintain communications with the FOB and outstations.
7. (U) LESSON LEARNED: Be persistent in the pursuit of information.
8. (U) RECOMMENDED ACTION: Battalion communications personnel must give all required information needed to teams prior to deployment.

Appendix H

ADDITIONAL LESSONS-LEARNED REFERENCES

Department of Energy LL Screening Guide:

<http://tis.eh.doe.gov/ll/sellls/screeningguide.html>

U.S. Army Europe (USAEUR) Lessons-Learned Library:

<http://www.ullos.army.mil/public/plsql/lib>

Center for Army Lessons-Learned:

<http://call.army.mil>

Canadian Army Lessons-Learned Centre:

<http://www.allc.com/website/english/indexe.htm>

AFLOAT Lessons-Learned – Naval Safety Center:

<http://www.safetycenter.cnavy.mil/afloat/Download/AfltLL.htm>

NCCAN Lessons-Learned:

<http://www.calib.com/nccanch/prevmnth/lessons/index.htm>

SUPSHIP Portsmouth's Lessons-Learned:

<http://po7.repair.navy.mil/LL/>